

Inspector's Report PL24.248413.

Development	4.2 MVA solar farm and ancillary development works.	
Location	Cooltubbrid West, Kilmacthomas, Co. Waterford.	
Planning Authority	Waterford City and County Council	
Planning Authority Reg. Ref.	17/96	
Applicant(s)	Elgin Energy Services Ltd.	
Type of Application	Permission	
Planning Authority Decision	Refusal	
Type of Appeal	First Party	
Appellant(s)	Elgin Energy Services Ltd.	
Observer(s)	None	
Date of Site Inspection	8 <sup>th</sup> July 2017	
Inspector	Susan McHugh	

# 1.0 Site Location and Description

- 1.1. The appeal site is located in a rural area in County Waterford and south of the N25 the Waterford to Dungarvan Road. The N25 is very well screened and is located at a lower level to the appeal site and at its closest point is 200m from the appeal site. The closest settlement is Kilmacthomas, located c. 1km to the north east. The site is positioned south west of the regional road (R677), one of three roads that connect Kilmacthomas (in a southwards direction) with the villages of Ballinabanogue and Ballylane (approx. 5.5km to the south).
- 1.2. The appeal site forms part of a larger farm holding of approx. 31.1ha, and has a stated area of 10.2ha. It comprises one large field and a portion of another. It is accessed directly from the R677 road via an existing private laneway which serves an existing house and farm building. An existing hardcore road runs to the eastern part of the site. The site is currently grassed.
- 1.3. The site is on an elevated position and is screened from the public road with a mixture of hedgerows and trees. The site is undulating and rises from a level of circa 43mAOD at the south western section of the site to a peak of circa 55mAOD to the north east. It is bounded by mature hedgerows and tress along its' boundaries.
- 1.4. The closest dwelling and farm buildings are located to the south east and accessed from a narrow road off the R677. There is a cluster of dwellings located to the east of the access road to the site along the R677.

# 2.0 **Proposed Development**

- 2.1. Planning permission is sought for a 4.2MVA solar farm comprising photovoltaic panels on ground mounted frames, four single storey inverter/transformer stations, one single storey terminal station, one single storey electrical switch room, 2.4m high security fencing (deer fencing), CCTV and all associated ancillary development works.
- 2.2. Electricity produced at the site which will supply enough energy for approximately 1,400 no. homes. It will be connected to the national grid via the local 38kV Kilmacthomas substation. This substation is located on the R677, 400m to the

southeast of the proposed solar farm. It is proposed that a 20kV underground cable connection, routed within the R677, will link the site to that substation.

- 2.3. The infrastructure associated with the proposed development will include a number of elements including:
  - Solar panels and mounting system- the linear arrays of solar panels will be mounted on steel support structures and tilted at 25 degrees. The proposed panels are typically set 0.6-0.8m above ground level at the lowest point increasing to a maximum height above ground level of 2.9m. The solar PV panels are to be arranged in south facing rows ranging from 2m to 6m apart within the existing field boundaries.
  - Inverter cabins- the inverter station turns the direct current into grid-compliant alternate current and feeds into the existing electricity network. The four central inverter stations will sit on a 250mm reinforced concrete slab. The typical inverter stations will measure 17.5sq.m in area and 3m in height. They are to be located in pairs along the norther western boundary of the site.
  - Underground cable trenches the cables will connect the solar arrays to the inverter stations.
  - Electrical switchroom will sit on an elevated 400mm reinforced concrete slab and will consist of a building measuring 10sq.m in area and 3.1m in height. It will be located along the access road close to the eastern boundary of the site.
  - Terminal Station will consist of a building measuring 40sq.m. in area and 3.375m in height and will sit on a 250mm reinforced concrete slab. It will be located to the west of the existing site entrance from the public road.
  - Security CCTV and fencing it is proposed to install ten 3m high pole mounted CCTV cameras located at all major corners around the perimeter of the site. The fencing proposed is deer fencing which will be 2.45m in height using timber posts and galvanised wire. It is also proposed to erect a double security gate at the end of the existing track and to the east of the proposed electrical switchroom.

- Internal access track it is proposed to upgrade and extend the existing access track which will run through the centre of the site and then along the western boundary and will provide for two vehicles turning / set down areas.
- Temporary construction a temporary wheel wash system will be located along the access track before entering the proposed solar farm and a temporary compound and steel storage container are proposed west of the electrical switchroom.
- 2.4. The land will continue to be used for agricultural purposes (e.g. sheep grazing) and will be returned to agricultural use at the end of the project.
- 2.5. A 50m ecological protection zone is located along the south eastern corner of the site and a 30m flooding exclusion zone is located along the south western corner of the site.
- 2.6. The application was accompanied by a Planning and Environmental Considerations Report, which addressed environmental matters including ecology, soils and geology, water and hydrogeology, air quality, traffic, glint and glare, landscape and visual impact and archaeology and cultural heritage. An Appropriate Assessment Screening Report was included in Appendix E. A Photomontages Booklet also accompanied the application.
- 2.7. The applicant is applying for a 10 year permission based on the pending grid connection from ESB Networks, and states that the operation life would be for a 30 year period.

# 3.0 Planning Authority Decision

## 3.1. Decision

The decision of the planning authority was to refuse planning permission 6<sup>th</sup> April 2017, for the following reason;

'It is considered that the proposed development could endanger public safety by reason of traffic hazard because it has not been demonstrated to the satisfaction of the planning authority that the glint and glare generated from the proposed development will not have a negative impact on the users of the N25 National Primary Road and the surrounding road network. The proposed development would therefore be contrary to the proper planning and sustainable development of the area.'

## 3.2. Planning Authority Report

- 3.2.1. The Planner's Report dated 3<sup>rd</sup> April 2017 is the basis for the Planning Authority decision. It includes:
  - Notes the absence of National Planning Guidelines pertaining to Solar photovoltaic (PV) farms.
  - Refers to the Renewable Energy Strategy for Waterford City and County 2016-2030 which has included a projection of 84.1MW of solar energy for Waterford up to 2030 which would require a landmass of 168.2ha. Notes permitted and decisions pending for solar farms and that the proposal would not exceed the Renewable Energy Strategy targets.
  - Considers having regard to the proximity of the site to the N25 that the development would have a significant impact on the visual amenities and landscape character of the area and a refusal is recommended on this basis.
  - Considers that the development will have the potential to cause a distraction to road users along the N25 given the glint and glare effects resulting in road safety concerns and a refusal is recommended on this basis.
  - Satisfied that if mitigation measures recommended in the Ecological Impact Assessment are adhered to the effects of the proposal are minimal. Recommends a condition in relation to fencing. Satisfied that the proposal will not lead to the loss a significant amount of agricultural land.
  - Considers that the proposal would have a detrimental impact on the residential amenity of the dwelling to the east of the site and recommends a refusal on this basis.

#### 3.2.2. Other Technical Reports

None on file.

## 3.3. **Prescribed Bodies**

Transport Infrastructure Ireland **TII** – Notes the Authority will rely on the planning authority to abide by official policy in relation to development on/affecting national roads as outlined in DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012), subject to the following:

- The Authority requests that the Council has regard to the provisions of Chapter 3 of the DoECLG Spatial Planning and National Roads Guidelines in the assessment and determination of the subject planning application.
- The Authority notes that the Glint and Glare analysis submitted to the Planning Authority shall ensure no reflection impact on the N25.

#### 3.4. Third Party Observations

None.

# 4.0 **Planning History**

#### 4.1. Appeal site

There is no previous planning history on the appeal site.

#### 4.2. Other Similar

There are several solar farm applications which have been decided by the Board, many for small scale proposals generally between 4 and 12 MW power output.

Those which are considered of relevance to this appeal include **PL93.247310** – Permission **granted** for the development of a solar PV energy development with 5MW power output in County Waterford (27<sup>th</sup> February 2017), and **PL91.247653** – Permission **granted** for the development of a solar PV energy development with 5MW power output in County Kerry (26<sup>th</sup> April 2017), and **PL08.247778** – Permission **granted** for a solar PV energy development with a 4MW power output in County Kerry (9<sup>th</sup> May 2017).

There is a proposed solar farm in County Limerick currently on appeal to the Board under ref: **PL91.248066** and another in County Meath ref. **PL17.248146**.

# 5.0 Policy Context

## 5.1. **Development Plan**

5.1.1. The Waterford County Development Plan 2011-2017 has had its lifetime extended, as per Section 11A of the Planning and Development Act 2000, as amended, and will remain in effect until the new Regional Spatial and Economic Strategy is made by the Southern Regional Assembly. Thereafter a new City and County Development Plan will be prepared.

Chapter 7 of the plan refers to infrastructure. Chapter 8 refers to Environment and Heritage and Chapter 10 to Development Management Standards.

Chapter 7 does not specifically refer to Solar Power. However, 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'.

Section 8.8 refers to Renewable Energy. Policy ENV10 states 'To facilitate and encourage sustainable development proposal for alternative energy sources and energy efficient technologies'.

Table 10.10 in Chapter 10 is the Land Use Zoning Objectives table. The Agriculture land use zoning objective is 'to provide for the development of agriculture and to protect and improve rural amenity'.

A variation to the Development Management Standards Chapter was adopted by the Council in September 2016. No further information is provided in relation to large scale solar energy projects.

Appendix A9 of the Plan is Scenic Landscape Evaluation.

## 5.1.2. Waterford City and County Renewable Energy Strategy 2016-2030

The Renewable Energy Strategy 2016-2030 forms part of the Waterford County Development Plan 2011-2017.

Section 5.00 addresses solar energy. It notes that Waterford is in the top 15% in terms of solar resource in Ireland and has good potential.

It notes that the National Renewable Energy Statement provides a target of 600MW of solar energy for Ireland by 2020. This Renewable Energy Statement has included a projection of 84.1MW of solar energy for Waterford up to 2030. It projects that this would require just over 168 hectares of land. It does not provide any guidance on the best locations. It refers directly in Appendix 3 to the subject application as a current solar farm grid application. It also refers to other projects in the area. It notes the potential disadvantages as land take, impact on crop production, glint/glare issues and possible hydrological effects.

# 5.2. Planning and Development Guidance Recommendation for Utility Scale Solar Photovoltaic Schemes in Ireland October 2016.

- 5.2.1. This is a research paper prepared by Future Analytics Consulting and which was funded by the SEAI. It does not purport to be a policy document. 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) development in Ireland.
- 5.2.2. It notes that over a hundred applications for USSPV developments have been lodged with planning authorities by October 2016 and that an estimated 594MW have been granted or are on appeal. The combined site area for these schemes is 1331.9 hectares.
- 5.2.3. Recommendations include that the development plans set out policy objectives to support USSPV development and put in place development management standards to control development. With respect to glint and glare assessments, it is recommended that a national standard for the undertaking of these assessments is

developed. It also recommended that the development of USSPV should not be prohibited in undulating landscapes and that a decommissioning statement should be included as a standard component of a planning application.

- 5.2.4. It is noted that four out of the seven developments refused planning permission (October 2016) have had glint and glare concerns citied as a ground for refusal. The sensitive receptors are loosely categorised as being: Residential dwellings, Historical Monument/Heritage Landscapes and Road Networks.
- 5.2.5. Future Analytics Consulting prepared a further update in December 2016 which stated that there have been at least 144 utility scale solar photovoltaic schemes submitted for planning permission in Ireland on 1,740 hectares with 387 MW capacity valid applications and 2,625 hectares with 537 MW (which includes valid applications and applications which were invalid, withdrawn and refused). It does not purport to be 100% reflection of the solar planning pipeline but rather for information purpose only.

#### 5.3. International Guidance

5.3.1. There are a number of guidance documents available in the UK. While they do not have a statutory basis in the Irish context, they are useful in informing the planning and environmental issues which arise. The most applicable in this instance is the Planning guidance for the development of large scale ground mounted PV systems BRE (Building Research Establishment 2013).

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

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

With respect to glint and glare it states: 'Glint may be produced as a direct reflection of the sun in the surface of the solar PV panel. It may be the source of the visual issues regarding viewer distraction. Glare is a continuous source of brightness, relative to diffused lighting. This is not a direct reflection of the sun, but rather a reflection of the bright sky around the sun. Glare is significantly less intense than glint. Solar PV panels are designed to absorb, not reflect, irradiation. However, the sensitivities associated with glint and glare, and the landscape/visual impact and the potential impact on aircraft safety, should be a consideration. In some instances, it may be necessary to seek a glint and glare assessment as part of a planning application. This may be particularly important if 'tracking' panels are proposed as these may cause differential diurnal and/or seasonal impacts. The potential for Solar PV panels, frames and supports to have a combined reflective quality should be assessed. This assessment needs to consider the likely reflective capacity of all the materials used in the construction of the solar PV farm.'

#### 5.4. Natural Heritage Designations

There are four European sites designated under the Habitats Directive located within 15km of the proposed development. These are as follows:

- Comeragh Mountains SAC (Site Code 001952);
- Mid-Waterford Coast SPA (Site Code 004193);
- Lower River Suir SAC (Site Code 002137);
- Glendine Wood SAC (Site Code 002324).

# 6.0 The Appeal

## 6.1. Grounds of Appeal

A first party appeal was received from Tobin Consulting Engineers on behalf of the applicant Elgin Energy Services Ltd against the Planning Authority's decision to refuse permission. The grounds of the appeal can be summarised as follows:

- As noted in the Glint and Glare Assessment Report produced by MacroWorks, and included in Appendix D, the level of reflectance from solar panels is roughly equivalent to still water (Shields, 2010). This percentage of reflectance is far below that of 'standard glass', 'snow' or 'steel' (Shields, 2010), all commonly found in the environment worldwide. Reflectance as a result of solar panels will therefore not occur in the form of a blinding flash, but in a similar manner to driving past a pond.
- Numerous examples of solar farms located within close proximity of road networks exist and are cited throughout the United Kingdom, the US, Germany, France and Korea. Images of these solar farms are included in Appendix E.
- Hazardous impacts as a result of glint and glare from solar farms have not been demonstrated. References a study carried out in Ohio, USA which found that no known problems of glint and glare were observed in relation to a solar farm directly north and adjacent to a highway bridge and interstate.
- The Glint and Glare Assessment demonstrated that, although glint and glare is theoretically possible along portions of the local and national road network (N25) to the north of the site, a moderate to high degree of screening in the surrounding environs meant that any glint and glare effects were reduced considerably and the magnitude of effect was likely to be reduced to very low magnitude or eliminated completely. These findings are supported by the submission by Transport Infrastructure Ireland (TII).
- Despite the existing screening in the surrounding area, the applicant submitted a proposal to supplement the existing hedgerows and boundaries within the proposed solar farm with the planting of whips. These hedgerows and boundaries are within the land that is under the control of the developer and consenting landowner the subject of this application.
- The concerns of Waterford City and County Council in relation to the reliance, albeit in the short term, on existing screening in the surrounding environs are acknowledged. The applicant proposes that the relevant boundaries are supplemented with semi-mature specimens, instead of whips, to ensure that the site is well screened from the outset of the project.

- Commitment to providing, for the first two years following first operation, detailed glint and glare surveys to the Planning Authority annually in order to confirm that no such impact has taken place. Mitigation measures, as the Planning Authority may specify, will be provided for to ensure such is achieved.
- Notes that the need for solar energy was recognised by the Planning Authority in relation to National Policy such as Food Harvest 2020, Regional Planning Guidelines- South East Region 2010-2022 and The Renewable Energy Strategy in Waterford which has included a projection for solar energy of 84.1MW for Waterford up to 2030.

## 6.2. Planning Authority Response

The Planning Authority states that, based on the information submitted in connection with the application, it has not been adequately demonstrated that the development will not negatively impact on road users of the N25 and the surrounding road network. The mitigation measures rely on planting along the N25 on lands outside the developers control. Given the lack of national guidance in relation to solar developments it is prudent to take a precautionary approach in relation to this development.

The Planning Authority are of the opinion that the appeal report does not include any additional grounds for overturning the Council's decision to refuse permission.

#### 6.3. Observations

None.

## 7.0 Assessment

This is a first party appeal against the decision of Waterford City and County Councils decision to refuse permission. There were no submissions to the planning authority from third parties/observers and none to the Board. Having regard to the terms of the planning authority decision and also the recommendation of the planning authority's planning officer I consider the keys issues in determining the appeal are as follows:

- Glint and Glare in relation to the N25
- Landscape Character and Visual Impact
- Residential Amenity
- Appropriate Assessment.

## 7.1. Glint and Glare in relation to the N25

- 7.1.1. Glint results from reflection of the sun off a surface and is seen as a momentary flash of bright light. Glare is a continuous source of brightness from the reflection of diffuse solar radiation.
- 7.1.2. Solar panels are normally dark in colour and designed to absorb daylight and therefore have a low level of reflectivity (or glare) when compared to other surfaces such as window glass, still water or snow. Any glint which would occur, would do so for short periods when the sun is shining above the plane of the PV panels.
- 7.1.3. The applicant states that the proposed solar panels are typically set 0.6-0.8m above ground level at the lowest point increasing to a maximum height above ground level of 2.9m. The panels will be mounted typically at 25 degrees to the horizontal but this may be adjusted to suit local conditions. The solar panels will be fixed in position using galvanised steel framing piles driven into the ground, so there will be no moving parts. The solar PV panels are to be arranged in south facing rows ranging from 2m to 6m apart within the existing field boundaries. It is proposed to allow a 5m to 10m buffer between the field boundaries, with the exception of a section of hedgerow (40m to the east and 10m to the west of the site entrance) which will need to be set back by 2.0m for visibility sightline purposes.
- 7.1.4. The proposal to augment existing planting would mitigate the potential impact to some extent.
- 7.1.5. The glint and glare assessment provided by the applicant in Chapter 9 of the Planning and Environmental Considerations Report, and Appendix G identified

receptors as nearby **road users**, dwellings and aviation. The report notes that solar reflections are theoretically possible along a local road running parallel to the N25 approx. 500m northwest of the site and also along a section of the L3209 local road that runs in a north-south direction, 1km west of the proposed solar farm. The report also notes that glint and glare is also theoretically possible along a considerable section of the N25 national primary route and along one of its associated interchanges. However, it is submitted that as a moderate to high degree of screening exists in the surrounding environs, no impact is likely.

- 7.1.6. The crux of this appeal relates to the potential negative impact of glint and glare on road users along the N25 and surrounding road network. The planning authority considered that the proposed development could endanger public safety by reason of a traffic hazard and this was the sole reason for refusal cited. I note that no report was received from the Transportation Department of the planning authority during the assessment of the application. I have examined the submission from the TII and while they note 'that the Glint and Glare analysis submitted to the Planning Authority shall ensure no reflection impact on the N25', they do not recommend that permission be refused.
- 7.1.7. As detailed in section 7.2 of my report below the existing site is well screened by existing planting as is the N25. The solar farm is intended to be well screened by additional planting from road users. If it cannot be seen, then there is no possibility of a solar reflection being experienced. On examination of the photomontages and from my site visit, that included consideration of the environs and surrounding road network, I am satisfied that the appeal site is already very well screened, particularly from the N25, and that the opportunity for glint and glare along the N25 and surrounding road network is very limited. As such I am satisfied that the proposed development would not give rise to a traffic hazard.
- 7.1.8. **Waterford Airport** which is situated approximately 23km east of the proposed solar farm has been included in the assessment. The report concludes that there will not be any significant nuisance or hazard effects generated from glint and glare along both runway approaches at Waterford Airport as a result of the proposed solar farm or at the air traffic control tower at Waterford Airport.

- 7.1.9. On appeal, the applicant has submitted further proposals in relation to screening measures with more mature planting which would take place on site.
- 7.1.10. I conclude, therefore, that the appeal should be upheld.

## 7.2. Landscape Character and Visual Impact

- 7.2.1. I note that the planning authority's planner, in their report, also recommended that permission be refused on the basis of the detrimental impact on the landscape and visual amenities of the area.
- 7.2.2. A Landscape and Visual Impact assessment was provided by the applicant in Chapter 10 of the Planning and Environmental Considerations Report accompanying the application. The Waterford City and County Development Plan does not include a list of designated views within the development plan. It does include designated scenic views, of which there are none located within the vicinity of the site. The scenic landscape evaluation that is incorporated within the Development Plan includes a map with designated scenic routes and areas of visual vulnerability. All of the designated scenic routes (yellow) shown are outside of the zone of theoretical visibility and will not be impacted by the proposed solar farm.
- 7.2.3. From a review of the assessment provided by the applicant including the photomontage booklet and from my site visit, I am satisfied the subject proposal will not be visually prominent from the N25 road or from the surrounding road network. I would also note that there are very limited views of the N25 from the appeal site. Due to the topography of the area, and the considerable hedgerow and forestry screening which already exists, I consider the proposal will not have a significant adverse effect on the N25. Views of the appeal site from adjoining viewpoints identified in the photomontages submitted were considered and visited during my site visit. I am satisfied that the visual assessment carried out is robust and that there are only very limited views of the site from the adjoining area.
- 7.2.4. The applicant has stated that, where necessary, existing hedgerows will be bolstered with under-planting and inter-planting of whip transplants in order to ensure dense and consistent screening of the site in perpetuity. The applicant has also proposed in their appeal submission to supplement the relevant boundaries with semi mature specimens instead of whips. They have also clarified that the hedgerows and

boundaries are within the control of the developer and consenting landowner the subject of this application. In light of the foregoing I do not consider that the proposal will cause a significant alteration to the appearance or character of the area.

#### 7.3. Residential Amenity

- 7.3.1. The planning authority's planner, in their report, also recommended that permission be refused on the basis of the impact of glint and glare on the residential amenity of properties in close proximity to the site.
- 7.3.2. The closest residential property is located 100m to the east of the proposed solar farm and is not in the applicants' ownership.
- 7.3.3. The glint and glare assessment provided by the applicant in Chapter 9 of the Planning and Environmental Considerations Report, and Appendix G examined solar refection effects in relation to nearby dwellings. This report identifies this dwelling as the only dwelling which has the potential to be affected by reflectance from March to October during the evening hours between 5:30pm and 8:00pm. Reflectance has the potential to occur for a maximum of 8 minutes per day during these time periods. The report notes that as this is a two storey dwelling it is only likely that the upper levels of this dwelling will be affected by reflectance.
- 7.3.4. I do not consider this to be a significant impact on the residential amenity of this property. I would also note that as already outlined above the site is well screened by mature planting and, given its separation to the cluster of residential dwellings located along the R677 to the north east of the site, I do not consider that the proposed development would impact on these properties.
- 7.3.5. I am satisfied that glint and glare would not result in any significant adverse impact on established residential amenities.

#### 7.4. Appropriate Assessment

An appropriate assessment screening report prepared by Tobin Consulting Engineers was submitted in Appendix E of the Planning and Environmental Considerations Report. I follow the staged approach to screening for appropriate assessment as recommended in both EU Guidance and by the Department of Environment, Heritage and Local Government: -

- 1. Description of the plan or project and local site or plan area characteristics.
- 2. Identification of relevant Natura 2000 sites and compilation of information on their qualifying interests and conservation objectives.
- 3. Assessment of likely significant effects-direct, indirect and cumulative, undertaken on the basis of available information.
- 4. Screening statement and conclusions.

## Project Description and Site Characteristics

The proposed development is as described in the report above and in the application documentation. It is proposed to construct a solar array with an export capacity of 4.2MVA in a land area of 10.2Ha. The site access track will comprise permeable gravel. The four central inverter stations will be 3m in height, the electrical switchroom will be 3.1m in height and the terminal station building will be 3.375m in height and will occupy 120sqm.

## Relevant Natura 2000 Sites, Qualifying Interests and Conservation Objectives

Four Natura Sites are identified as being within a 15km radius of the site. The sites include;

- Comeragh Mountains SAC (Site Code 001952) 6km to the North West
- Mid Waterford Coast SPA (Site Code 004193) 8km to the South
- Lower River Suir SAC (Site Code 002137) 9.km North East
- Glendine Wood SAC (Site Code 002324) 13km South West

One of the Natura 2000 sites is shown to have a linkage with the proposed site- The Mid Waterford Coast SPA. The other three are not ecologically linked. This one site can be considered further.

Site Code, Site Name and Designation	Approx. distance from the site at Cooltubbrid West	Qualifying Habitats and Species
004193 Mid Waterford Coast SPA	8km South	Cormorant, Peregrine, Herring Gull, Chough.

The generic conservation objective is to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

## Assessment of likely significant effects

The proposed development is linked to the Mid-Waterford Coast SPA via two small streams, 'Graigueshoneen' and 'Cooltubbrid West' which both form boundaries of the site and discharge into the Ballyabanoge South River. The Ballynabanoge South River flows in an easterly/south-easterly direction along the south-western landholding boundary. The Ballynabanoge South River discharges to the Mahon River, ca. 3km to the south east of the subject site. The Mahon River flows in a southerly direction, through the Mahon Estuary, to discharge to the Eastern Celtic Sea where the Mid-Waterford Coast SPA is located.

The applicant notes that polluting matter such as sediment or hydrocarbons could potentially be mobilised during installation of the access road or within the development site as a whole. The potential for connectivity to land drainage features and watercourses occurring along the north, south and western boundaries of the development site is evaluated. The potential significance is considered with reference to the low level of soil disturbance proposed during construction and operation works and the intermittent nature of the flow in the watercourse.

I am satisfied that the implementation of best practice procedures as described in Section 3.2.3 of the Appropriate Assessment Screening Report will reduce the likelihood of significant effects that could impact on water quality.

The Mid-Waterford Coast SPA refers to sea cliffs and nearby cliff edge habitat located approximately 8km south of the appeal site. I would agree, therefore, that

the likelihood of significant effects to this site by pollutants, construction or operational disturbance or indirect water quality impacts is unlikely. It is also unlikely that the improved grassland habitat at the proposed solar farm would provide significant habitat to attract any of the birds that are subject of conservation objectives for the site.

The proposed development will not have any likely significant effects, direct or indirect, on the qualifying species of the SPA.

In terms of in-combination effects, there are no other similar scale projects or other relevant developments in the area so these are not likely to arise.

## 7.5. Screening Statement and Conclusions

7.5.1. In conclusion, having regard to the foregoing, it is reasonable to conclude, on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually and in combination with other plans or projects, would not be likely to have a significant effect on any European Site and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

# 8.0 Recommendation

8.1. I recommend that planning permission be granted, subject to conditions.

# 9.0 **Reasons and Considerations**

9.1. Having regard to the provisions of the Waterford County Development Plan 2011-2017, including the Waterford City and County Renewable Energy Strategy 2016-2030, and the nature and scale of the development proposed, the suitability of the aspect and topography of the site, the pattern of development in the area, it is considered that, subject to compliance with the conditions set out below, the proposal would not endanger public safety by reason of a traffic hazard or have a negative impact on the users of the N25 National Primary Road and the surrounding road network as a result of glint and glare, would not seriously injure the residential amenities of the area and would not detract from the visual amenities of the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

# 10.0 Conditions

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

Reason: In the interest of clarity.

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

Reason: In the interest of clarity.

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 having regard to the circumstances then prevailing and in the interest of orderly development.

4. Prior to commencement of development, a detailed restoration plan, providing for removal of all structures, foundations and access roads to a specific timescale shall be submitted to, and agreed in writing with the planning authority. On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations, shall be dismantled and removed from the site. The site (including all access roads) shall be restored in accordance with the said plan and all decommissioned structures shall be removed within three months of decommissioning.

Reason: In the interest of orderly development.

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

Reason: In the interest of visual amenity and residential amenity.

7. Cables from the solar arrays to the inverters and substation shall be located underground.

Reason: In the interest of visual amenity.

8. The site shall be landscaped in accordance with a comprehensive scheme of landscaping, details of which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This scheme shall provide a comprehensive landscape plan to provide for the landscaping along the western site boundary which shall ensure the proposed development is visually screened from views along the N25 road. All planting shall be adequately protected from damage until established. Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the completion of the development shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.

Reason: In the interest of residential and visual amenity.

9. Prior to commencement of development, details of the structures of the security fence showing provision for the movement of mammals shall be submitted for prior approval to the planning authority. This shall be facilitated through the provision of mammal access gates every 100metres along the perimeter fence and in accordance with standard guidelines for provision of mammal access (NRA 2008).

Reason: To allow wildlife to continue to have access across 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 noise management measures and off-site disposal of construction/demolition waste.

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

11. 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.

12. 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. The relevant Development Contribution Scheme was adopted by Waterford City and County Council on 12<sup>th</sup> February 2015. The contribution shall be paid prior to the commencement of the development.

**Reason**: It is a requirement of the Planning and Development Act 2000 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.

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

Pleanala for determination.

**Reason**: To ensure satisfactory reinstatement of the site.

Susan McHugh Inspectorate

15<sup>th</sup> August 2017