



An  
Bord  
Pleanála

## Inspector's Report

### ABP-315975-23

<b>Development</b>	Amendment to the design of the previously approved development (Planning Reference: 21261), which comprises consent for a 10 year period to construct and a 40 year period to operate a 142.7 hectare Solar PV Energy Development. (A Natura Impact Statement will also be submitted)
<b>Location</b>	Monaincha Townland, Roscrea, Co. Tipperary
<b>Planning Authority</b>	Tipperary County Council
<b>Planning Authority Reg. Ref.</b>	22662
<b>Applicant(s)</b>	Soleire Renewables SPV Alpha 2 Limited
<b>Type of Application</b>	Planning Permission
<b>Planning Authority Decision</b>	Grant
<b>Type of Appeal</b>	First Party-v-Conditions (S.139)
<b>Appellant(s)</b>	Soleire Renewables SPV Alpha 2 Limited
<b>Observer(s)</b>	None
<b>Date of Site Inspection</b>	5 <sup>th</sup> September 2023
<b>Inspector</b>	Laura Finn

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## 1.0 Introduction

This is a first party appeal against a condition attached to the Notification of a Decision to Grant Permission by Tipperary County Council(TCC) relating to the operational lifetime for a solar farm. The condition requires the solar farm to have an operational lifetime of 25 years. The first party is seeking an operational lifetime of 40 years.

## 2.0 Site Location and Description

The appeal site is located in County Tipperary close to the border with County Laois. The site is accessed via a forestry track leading east to join the local road (L1510) to the east of the site. The site, which has a stated area of c. 142.7 hectares is located in the townland of Monaincha, c. 4.5km south-east of Roscrea town and c. 1.4km north-west of Knock village. The site is located c. 1km north of the M7 Motorway and c. 1.8km south of the R445 Regional Road. The River Nore is located along the southern site boundary. The nearest residential property is located c. 520m from the site boundary.

The proposed solar site is located within the Monaincha Wind Farm, which comprises 15 turbines and has been operational since 2013. Access within the site is via existing 2.5m wide tracks, that were constructed for the windfarm. The site is a single land parcel which is generally flat, low-lying lands and was formerly used for peat extraction and is mainly a cutaway bog with a portion of the site being agricultural land.

## 3.0 Proposed Development

The proposed development consists of amendments to the design of the previously approved development (TCC File Ref.: 21261), to operate a 142.7 hectare Solar PV Energy Development. The amendments comprise the following;

- Increase in the height of the Solar PV panels from 1.8m to 2m;
- Increase in the bottom height of the Solar PV panels from 0.8m to 1m off the ground;
- Reduction in the spacing of Solar PV rows (strings) from 2.75m to 2.5m;

- Decrease in size of solar panels from 2,450mm x 1,135mm to 2,274mm x 1,134mm;
- Increase in the area of transformers/inverters from 10sqm to 12.1sqm;
- An increase in the number of solar panels from 211,925 to 235,750.
- The energy output from the amendment application increases from 70MW to 134MW.

As per the cover letter dated 25<sup>th</sup> November 2022, the applicant is seeking a 10 year permission in which to commence construction and a 40 year operation of the solar farm.

#### 4.0 **Planning Authority Decision**

##### 4.1. **Decision**

The planning authority decided to grant permission for the proposed development subject to three conditions on 7<sup>th</sup> February 2023.

The condition subject of this appeal is as follows:

##### **Condition 2**

The permission shall be for a period of 25 years from the date of commissioning of the solar array to include the decommissioning period.

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

##### 4.2. **Planning Authority Reports**

###### 4.2.1. **Planning Report**

The following statements in the report refer to matters which may be of relevance for the consideration of the appeal:

- Principle of the development of renewable energy resources fully supported by policy of the County Development Plan.

- Principle of the proposed development acceptable, including design and overall layout of the solar farm.
- The Landscape and Visual Impact Assessment (LVIA) assessed the potential impact from 7 viewpoints on the landscape. Having regard to the extent of the alterations proposed and anticipated visibility of same, it is considered that the proposed alterations are acceptable and will not significantly alter the landscape from that which has been permitted.
- Glint and Glare – Agree with assertion in the planning report that mitigation measures for residential receptors including screening in the form of existing vegetation and/or commercial property will significantly obstruct the views of the reflecting panels thus eliminating solar reflections.
- No significant impacts anticipated in terms of biodiversity, glint and glare, archaeology and cultural heritage assessment, traffic and noise.
- Satisfied that due to the relatively minor nature of the alterations proposed to the original permission, it is considered that the impacts on any Natura 2000 sites or Natural Heritage Sites will not be exacerbated by the change in layout of the solar farm, alterations to the size or increase in the number of PV panels etc.
- No explanation or rationale was given in the Local Authority Planning Assessment in relation to the reduction in operational timespan from the requested 40 years to 25 years.

#### 4.2.2. **Other Technical Reports**

None.

#### 4.3. **Prescribed Bodies**

**TII (16<sup>th</sup> December 2022 and 7<sup>th</sup> February 2023):** Requests that the Planning authority 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). The submission sets out a number of specific conditions in relation to access and roads.

#### 4.4. **Third Party Observations**

None.

#### 5.0 **Planning History**

##### 5.1. **Subject Site**

**Solar Farm:** Planning permission granted for a 142.7ha solar farm by Tipperary County Council on 26<sup>th</sup> April 2021. Permission approved for 10 years with a 25-year operating period and subsequent decommission. (Tipperary Ref: 21261) This application is the subject of the current amendment application.

**Overhead 38kV Line:** Planning permission granted on 23<sup>rd</sup> February 2012, for overhead 38kV line from Ikerrin 110kV station to the proposed Monaincha Windfarm 38kV station. This development traverses the current application site. (Tipperary File Ref: 11510442)

##### 5.2. **Other Relevant Permissions**

**Solar Farm:** Planning permission granted for amendments to a solar farm including construction of battery energy storage system. Permission approved for 25 years. Currently on appeal in relation to the lifespan of the permission. Requesting an alteration to Condition 2 for an operational lifespan of 40 years. (Tipperary Ref: 2310, ABP Ref: ABP-316131-23). This application relates to lands located c. 330m from the southwestern boundary of the subject site. It is currently before the Board, also the subject of a first party appeal. The appeal also relates to the life of the grant of planning permission, seeking an increase from 25 to 40 years.

**Solar Farm:** Planning permission granted for a 29.09ha solar farm. Permission approved for 10-year permission from date of final grant with a 40-year operation from the date of commissioning. (Tipperary Ref: 19601323) (Please note that this case has been misrepresented in the Local Authority Assessment as being on site, while in fact, it is located on lands outside the site in the townland of Derrymore, Roscrea c. 3km to the southwest).

## 6.0 Policy Context

### 6.1. Renewable Energy Policy Context (EU, National and Regional)

#### 6.1.1. REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022

This plan was prepared in response to the Russian invasion of Ukraine. It focuses on the need to end the EU's dependence on Russian fossil fuels and to tackle the climate crisis. It includes the accelerated rollout of renewable energy. It amends the Directive on the Promotion of the Use of Energy from Renewable Sources (Directive EU 2018/2001) to require that 45% of energy is from renewable sources. It notes that lengthy, complex administrative procedures are a key barrier to investment in renewable energy and its infrastructure. The Directive simplifies and shortens the length of the administrative permit granting processes in certain environmental-related aspects. This includes national plans for designated renewable go-to areas, that have been subject to SEA.

Article 1(10) inserts a new Article 16d to ensure that plants for the production of energy from renewable sources, their connection to the grid, the related grid itself or storage assets are presumed to be of overriding public interest for specific purposes.

The following Article 16d on Overriding Public Interest is inserted:

*“By [three months from entry into force], until climate neutrality is achieved, Member States shall ensure that, in the permit-granting process, the planning, construction and operation of plants for the production of energy from renewable sources, their connection to the grid and the related grid itself and storage assets are presumed as being in the overriding public interest and serving public health and safety when balancing legal interests in the individual cases for the purposes of Articles 6(4) and 16(1)(c) of Directive 92/43/EEC, Article 4(7) of Directive 2000/60/EC and Article 9(1)(a) of Directive 2009/147/EC.”*

It states that:

*“Renewable energy sources are crucial to fight climate change, reduce energy prices, decrease the Union's dependence on fossil fuels and ensure the Union's security of supply. For the purposes of the relevant Union environmental*



*legislation, in the necessary case-by-case assessments to ascertain whether a plant for the production of energy from renewable sources, its connection to the grid, the related grid itself or storage assets is of overriding public interest in a particular case, Member States should presume these plants and their related infrastructure as being of overriding public interest and serving public health and safety, except where there is clear evidence that these projects have major adverse effects on the environment which cannot be mitigated or compensated. Considering such plants as being of overriding public interest and serving public health and safety would allow such projects to benefit from a simplified assessment.'*

**6.1.2. Energy Security in Ireland to 2030, Energy Security Package, Nov. 2023**

This states that Irelands energy security policy is defined by three policy objectives including sustainability, affordability and security. These objectives are underpinned by a broad range of policy initiatives currently in implementation. The document confirms that Irelands future energy will be secured by moving from an oil, peat, coal and gas-based energy system to an **electricity-led system** maximising our renewable energy potential.

**6.1.3. European Green Deal 2020**

The aim of this policy is to make Europe climate neutral by 2050. In 2021, the European Climate Law made greenhouse gas emission targets a legal obligation. These targets were increased from 40% to 55% by 2030.

**6.1.4. Policy Statement on Security of Electricity Supply, 2021**

This states that the Programme for Government requires a 51% reduction in greenhouse gas emissions by 2030 and that 80% of electricity consumption will come from renewable sources by 2030. Ensuring energy security is a national priority, as the electricity system decarbonises towards net zero emissions.

**6.1.5. National Climate and Energy Plan 2021-2030 (NCEP)**

Ireland's target to reduce greenhouse gas emissions increased from 40% to 55% by 2030. It refers to reaching 70% of energy from renewables by 2030, underpinned by the Renewable Energy Support Scheme. Energy security is a key priority.

#### 6.1.6. **Climate Action Plan 2023 (CAP 2023)**

Climate Action Plan 2023 is the first plan prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021 and following the introduction in 2022 of economy-wide carbon budgets and sectoral emissions ceilings. This plan sets a roadmap for taking decisive action to halve Ireland's emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. Among the most important measures in the plan is to increase the proportion of renewable electricity to up to 80% by 2030, including 8GW of solar PV capacity including 2.5GW of non-new grid solar.

#### 6.1.7. **National Planning Framework 2018-2040 (NPF)**

National Strategic Outcome 8 is to transition Ireland to a low carbon and climate resilient society. National Strategic Outcome 9 is the sustainable management of water. National Policy Objective 54 seeks to reduce our carbon footprint by integrating climate action into the planning systems. National Policy Objective 55 promotes the use of renewable energy. National Policy Objective 57 requires that River Basin Management Plan Objectives should be fully considered.

Ireland's national energy policy is based upon sustainability, security of supply and competitiveness. The National Planning Framework is subject to review at present, with part of the review focused on climate change.

#### 6.1.8. **The National Development Plan 2021-2030**

It refers to an 80% target for renewable sources.

#### 6.1.9. **Regional Spatial and Economic Strategy for the Southern Region (2020)**

This commits to implementing regional policy consistent with the Climate Action Plan 2021 and the NPF. Decarbonisation is considered in Regional Policy Objective 87, 88 and 90 to 104.

#### 6.2. **Tipperary County Development Plan 2022 - 2028**

The relevant plan to this assessment is the Tipperary County Development Plan 2022 – 2028, which came into effect on 22<sup>nd</sup> August 2022.

Chapter 3 relates to the Plans Strategic Objectives, and contains a number of relevant policies including *inter alia*:

- **SO–1:** *To support the just transition to a climate resilient, biodiversity-rich, environmentally-sustainable and climate-neutral economy.*
- **Policy 3–1:** *Promote and facilitate renewable energy development, in accordance with the policies and objectives of the Tipperary Renewable Energy Strategy 2016 (and any review thereof), and the Tipperary Climate Adaptation Strategy 2019.*

Chapter 10 of the Plan relates to Renewable Energy and Bioeconomy and contains the following relevant policy:

- **Policy 10-1:** *Support and facilitate new development that will produce energy from local renewable sources such as hydro, bioenergy, wind, solar, geothermal and landfill gas, including renewable and non-renewable enabling plant, subject to compliance with normal planning and environmental criteria, in co-operation with statutory and other energy providers. The provisions of the Tipperary Renewable Energy Strategy (and any review thereof) as set out in Volume 3, will apply to new development.*

The Tipperary Renewable Energy Strategy is set out in Volume 3, Appendix 2. Section 6.8 outlines the key policy and consideration for solar farm developments as follows:

- **Policy RE10: Ground Mounted for Solar PV Installations** states:  
*It is the policy of the Council to facilitate solar energy installations where it is demonstrated to the satisfaction of the Council that there will be no significant adverse impact on the built and natural environment, the visual character of the landscape or on residential amenity.*

Other policies of relevance in the Development Plan are contained in Chapter 11, which relates to Environment and Natural Assets including Habitats Directive (Policy 11-1, 11-2 and 11-3), Biodiversity and Water Quality (Policy 11-4, 11-7), Flooding (Policy 11-9) and Chapter 13 which relates to Built Heritage in relation to archaeology (Policy 13-6).

### 6.3. Natural Heritage Designations

Nine European sites occur within a 15km radius of the proposed development, two of which are hydrologically connected downstream of the proposed development.

The two Natura 2000 sites hydrologically linked include:

- The River Nore SPA (Site Code 004233) – c. 4km to the east and 4.8km downstream.
- The River Barrow and River Nore SAC (Site Code 002162) – c. 10.5km to the north-east and 13km downstream.

The Slieve Bloom Mountains SPA (Site Code 004160) is the closest European site, located c. 1.7km to the north.

There are two NHA's located within close proximity to the site, the Monaincha Bog/Ballaghmore Bog NHA (Site Code:000652) lies within c. 1km to the north and the Nore Valley Bogs NHA (Site Code: 001853) is located c. 2km to the south.

The application was accompanied by an NIS. See Section 9.0 of this report for further detail.

### 6.4. EIA Screening

Solar energy development is not listed as a class of development for the purposes of EIA under Part 2 of Schedule 5, within the Planning and Development Regulations 2001 (as amended). An Environmental Impact Assessment Screening Report having regard to the criteria set out in Schedule 7 of the Regulations accompanied the planning application.

The Planning and Development (Amendment) (No. 2) Regulations 2023 (S.I. 383 of 2023) requires from 1st August 2023 that Projects for the restructuring of rural land holdings are screened for the purposes of Environmental Impact Assessment, as follows:

Amendment of Schedule 5, Part 2, Class 1 of the Principal Regulations is amended:

(a) By the insertion of the following before paragraph (c):

- (a) Projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must

comply with the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.

#### 6.4.1. **Additional Information Request by An Bord Pleanála**

A request was made to the applicant under Section 132 of the Planning and Development Act 2000, (as amended) on 25<sup>th</sup> September 2023 requesting the applicant to specifically screen the proposal for EIA under the Planning and Development (Amendment) (No. 2) Regulations 2023 (S.I. 383 of 2023) – ‘Projects for the restructuring of rural land holdings’.

#### 6.4.2. **Further Information Response**

A response was received on behalf of the applicant on the 13<sup>th</sup> October 2023.

It stated the following:

- (a) In relation to the length of field boundary to be removed, it was confirmed that the proposed development does not include any field boundary removal.
- (b) In relation to contouring, it is proposed to utilise the existing windfarm access tracks for the proposed solar farm and existing hardstand area for the temporary construction compound. The solar panel array and fencing is to be pile driven. The underground cabling is cut and fill with no soil extraction. Proposed landscaping will not result in any recontouring. There are 34 transformers proposed, which comprises a total area of c. 411.26sqm (0.04ha), where minor levelling or recontouring will take place which is significantly less than the 5 hectares EIA screening threshold.
- (c) In relation to restructuring, it was confirmed that there will be no area of land to be restructured by removal of field boundaries.

Having regard to the above, I am satisfied that the proposed solar farm is not a class that requires EIA or screening for EIA. I refer to Form no. 2 Preliminary Examination

appended to this report and conclude that there is no real likelihood of significant effects on the environment and that EIA is not required.

## 7.0 The Appeal

### 7.1. Grounds of Appeal

The Applicant submitted a First-Party Appeal to the Board on 6<sup>th</sup> March 2023 in respect of Condition No. 2 attached to the Notification of Decision to Grant Permission, which states that *'the permission shall be for a period of 25 years from the date of the commissioning of the solar array to include the decommissioning period.'* The reason stated is *'To enable the planning authority to review the operation of the solar array in the light of the circumstances then prevailing'*.

The grounds of appeal can be summarised as follows:

- The Local Authority originally granted permission for TCC File Ref.: 21261, with Condition 2 limiting the operational lifetime of the solar farm to 25 years.
- Subsequently, amendments were sought to the permitted development, with an operational lifetime of 40 years, after which time the solar farm would be decommissioned.
- Section 139 of the Act enables the Board to consider where conditions to the Notification of Grant of Permission should be revised. It is noted that the case includes physical works and as such would constitute development.
- A 40-year operational lifetime was sought to warrant such a large-scale infrastructure projects economic viability and feasibility. A 40-year lifetime is proportionate to the 10-year timeframe permitted and a 25-year operational life is disproportionately short.
- No specific reason has been given by the Council as to why such a restrictive operational lifetime should apply to this site.
- A 40-year lifetime operation would guarantee the contribution of carbon free electricity generation in excess of European and the Governments renewable energy targets, thereby guaranteeing Irelands contribution to net-zero within the 21<sup>st</sup> century.

- The applicant provides examples of solar farms in Roscrea which were granted permission by Tipperary County Council and the Board with operational lifetimes of between 30 and 40 years.
- Planning considerations pertaining to similar precedent cases in Roscrea are highlighted, as follows;
  - Derrymore, Roscrea, Co. Tipperary – 40-year permission – Council File Ref. 22652 (Amendment application to Erkina, Derrymore, Roscrea noted below – Council File Ref 19/601323)
  - Erkina, Derrymore, Roscrea – 40-year permission – Council File Ref. 19/601323
- The applicant further lists examples of solar farms granted permission in the wider county, the majority of which were permitted with operation lifetimes of 30 and 35 years, as follows;
  - Ballycarrane, Thurles – 30-year permission – Council File Ref. 19/601159
  - Monaraha, Cahir – 30-year permission – Council File Ref. 22152
  - Rathduff, Thomastown Demense South – 35-year permission – Council File Ref. 211014
  - Baralleen and Lisheen – 35-year permission – Council File Ref. 211109
  - Kylecarry and Ballyryan – 30-year permission – Council File Ref. 22165
  - Ballynagranna and Deerparklodge, Carrick-on-Suir – 35-year permission - Council File Ref. 211818
  - Kilrue (Meath County Council) – 35-year permission – ABP Ref. ABP-311831-21 (Meath County Council Ref. 21/837)
- The proposal specifically set an operational lifetime of 40-years due to its integration with other solar farms previously granted permission.
- As part of the planning application process, careful consideration was given by the applicant to technical, engineering, environmental, health and safety and land use planning viability in the siting and design of the solar farm, and mitigation measures were included where required.

- Further, the applicant addressed environmental, landscape and visual amenity and neighbour amenity in both the original and amendment application.
- Through the planning process, the potential impacts have been identified, assessed and mitigated against where mitigation was considered necessary.
- The financial feasibility of the proposed development is hindered by the imposition of a 25-year operation lifetime through strategic financial implications for initiation and returns on the projects.
- The standard application of an operational lifetime of 35-40 years enables commercial interests to realistically calculate investment and return on such projects.
- Financing of the project has been calculated across a 40-year period as stated in the development description.
- With improving solar panel technology, the industry is expecting solar panels to function for much longer periods and it is now reasonable to expect solar panel technology to function adequately for up to 40 years.
- The Council has provided a full and robust assessment of the proposed development against all planning considerations.
- The applicant requests that the wording of Condition No. 2 is amended to provide for a 40-year period from the date of the commissioning to include the decommissioning period.

## 7.2. **Planning Authority Response**

No response received.

## 7.3. **Observations**

None.

## 7.4. **Legislation**

7.4.1. Section 139 of the Planning and Development Act 2000 (as amended) states;

**139. - (1) Where—**



*(a) an appeal is brought against a decision of a planning authority to grant a permission,*

*(b) the appeal relates only to a condition or conditions that the decision provides that the permission shall be subject to, and*

*(c) the Board is satisfied, having regard to the nature of the condition or conditions, that the determination by the Board of the relevant application as if it had been made to it in the first instance would not be warranted,*

*then, subject to compliance by the Board with subsection (2), the Board may, in its absolute discretion, give to the relevant planning authority such directions as it considers appropriate relating to the attachment, amendment or removal by that authority either of the condition or conditions to which the appeal relates or of other conditions.*

*(2) In exercising the power conferred on it by subsection (1), apart from considering the condition or conditions to which the relevant appeal relates, the Board shall be restricted to considering—*

*(a) the matters set out in section 34 (2)(a), and*

*(b) the terms of any previous permission considered by the Board to be relevant.*

## **8.0 Assessment**

This First-Party Appeal relates only to Condition No. 2 attached to the Notification of a Decision to Grant Permission by Tipperary County Council relating to the operational lifetime for a solar farm, from the 40 years requested to 25 years.

The proposed development will result in minor alterations including amendments to the layout and minimal increases to the panels/transformers to the previously permitted solar farm. The Local Authority have carried out a full assessment of the proposed development and I concur with their assessment that the design and layout changes are considered acceptable. Having reviewed the planning documentation, I am satisfied that the proposal would not have any significant impacts in terms of biodiversity, glint and glare, archaeology architecture and cultural heritage, traffic, noise, ecology and hydrology. Following a review of the LVIA, I concur with the Local Authority's Planning Officer that the proposed alterations are acceptable and will not

significantly alter the landscape from that which has been permitted. In this regard, I am satisfied that the solar farm development is in accordance with the proper planning and sustainable development of the area, and that the determination of the Board of the application as if it had been made to it in the first instance would not be warranted. My assessment will therefore be limited to the matters raised in relation to the terms of the Condition, pursuant to the provisions of Section 139 of the Planning and Development Act 2000 (as amended).

The applicant has indicated that the solar farm will provide carbon free electricity for up to 14,000 homes and displace 30,000 tonnes of CO<sub>2</sub> per annum. Having regard to European, National and Local policy in relation to renewable energy, specifically in relation to the REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022, The Energy Security in Ireland to 2030, Energy Security Package, Nov. 2023, The Green Deal and the Climate Action Plan 2023 which aims to halve Ireland's emissions by 2030 and reach net zero no later than 2050 and the planning history associated with the site, I consider that the principle of development on the site is acceptable. I concur with the Local Authority's Planning Officer that the principle of the development of renewable energy resources is fully supported by policy as set out in the County Development Plan.

As outlined above, Condition 2 reduces the lifespan of the permission to a period of 25 years from the date of commissioning of the solar array to include the decommissioning period. The stated reason for refusal is '*To enable the planning authority to review the operation of the solar array in the light of the circumstances then prevailing.*'

There is no discussion in the Local Authority Report in relation to the reasoning for reducing the lifetime from the requested 40 years to 25 years, although it is noted that the original permission was limited by condition to an operating period of 25 years. Despite being requested to do so, the Planning Authority did not provide any rationale for limiting the life of the Solar farm to 25 years.

The applicant has analysed recent planning precedent for similar solar farms and has demonstrated that the normal lifespan granted by the Board and Tipperary County Council for solar farms is from 30 to 40 years.

The applicant has outlined, in their appeal, the financial investment required and financial feasibility implications for such largescale renewable energy projects. The applicant has also highlighted the need for integration with other solar farms in the vicinity. I therefore acknowledge that the applicants have set out the rationale for the 40-year operational lifespan for the planning permission. As outlined above, I am satisfied that the proposed development will not have any adverse impacts on the environment and that the extension of the lifespan to 40 years will not have any adverse environmental impacts that have not already been assessed. The extension of the life of the permission as sought by the first party is therefore appropriate.

### **8.1. Conclusion**

As no rationale has been provided by the Local Authority for the reduction in the lifespan of the solar farm, based on National and Local policy and precedent of other similar cases in Tipperary, I recommend that Condition 2 is amended to provide for a lifespan of 40 years.

## **9.0 Appropriate Assessment**

### **9.1. Compliance with Articles 6(3) of the EU Habitats Directive**

The requirements of Article 6(3) as related to screening the need for appropriate assessment of a project under part XAB, section 177U of the Planning and Development Act 2000 (as amended) are considered fully in this section.

The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given. The proposed development is not directly connected to or necessary to the management of any European site and, therefore, is subject to the provisions of Article 6(3).

## 9.2. Stage 1 Screening for Appropriate Assessment

The application is accompanied by a 'Natura Impact Statement' (NIS) report, which includes an Appropriate Assessment Screening prepared by Wetlands Surveys Ireland, dated February 2021. The application is also accompanied by an Ecological Impact Statement prepared by Wetland Surveys Ireland dated February 2021.

The Stage 1 screening assessment submitted as part of the NIS Report comprises information in support of screening for AA to be undertaken by the competent authority. The Stage 1 screening report was prepared in line with current best practice guidance, provides a description of the proposed development, and identifies European sites within a possible zone of influence. The applicant identifies 9 no. European Sites (2 no. SPA's and 7 no. SACs) within a 15km radius of the proposed development site. While 15km is not a statutory requirement, I am satisfied that it is a reasonable parameter and that the sites identified are acceptable.

Sites considered relevant to this appeal site are set out below:

### Summary Table of European Sites Within the Zone of Influence of the Proposed Development

<b>Slieve Bloom Mountains SPA (NPWS Site Code – 004160) c. 1.7km to the north</b> Special Conservation Objectives are set by the NPWS (23 Sep 2022 – Version 1)		
<b>Qualifying Interest</b>	<b>Conservation Objectives</b>	<b>Connectivity-Source-Pathway-Receptor</b>
Hen Harrier (Circus cyaneus) [A082]	To restore the favourable conservation condition of hen harrier in Slieve Bloom Mountains SPA.	The Hen Harrier is associated with upland peatland habitats and immature forestry. The habitats within the footprint of the proposed development are not suitable for breeding Hen Harrier. Considering the distance removed from the SPA and the habitat requirements and typical foraging range of breeding Hen Harrier, it is considered that the proposed development will not lead to adverse impacts on the breeding population of Hen Harrier of the Slieve Bloom Mountains SPA and therefore the SPA can be screened out.  <b>Screened out. No hydrological impact and distance sufficient for no impacts due to works.</b>

<b>River Nore SPA (NPWS Site Code – 004233)</b> c. 4km to the east and 4.8km downstream Special Conservation Objectives are set by the NPWS (12/10/22 – Version 1)		
<b>Qualifying Interest</b>	<b>Conservation Objectives</b>	<b>Connectivity-Source-Pathway-Receptor</b>
Kingfisher (Alcedo atthis) [A229]	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interest for this SPA.	Considering the hydrological connectivity between the proposed development and the SPA, and the scale of the proposed solar farm site, in the absence of mitigation, following the precautionary principle, it is deemed that potential impacts on the River Nore SPA cannot be ruled out beyond scientific doubt.  <b>Screened in due to potential hydrological connection by reason of surface water flow and the source-pathway-receptor model.</b>
<b>Slieve Bloom Mountains SAC (NPWS Site Code 000412)</b> c. 6.7km to the north Special Conservation Objectives are set by the NPWS (06 Sept 2016 – Version 1)		
<b>Qualifying Interest</b>	<b>Conservation Objectives</b>	<b>Connectivity-Source-Pathway-Receptor</b>
North Atlantic Wet heaths with <i>Erica tetralix</i> [4010]  Blanket bog (*if active) [7130]  Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	To restore the favourable conservation condition of Northern Atlantic wet heaths with <i>Erica tetralix</i> in Slieve Bloom Mountains SAC.  To restore the favourable conservation condition of Blanket bogs in Slieve Bloom Mountains SAC.  To restore the favourable conservation condition of Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) in Slieve Bloom Mountains SAC.	The SAC is hydrologically isolated from the proposed development. Considering the distance removed, and the absence of hydrological connectivity between the proposed development and the SAC, adverse impacts on the Slieve Bloom Mountains SAC are not foreseen.  <b>Screened out. No hydrological impact and distance sufficient for no impacts due to works.</b>
<b>Coolrain Bog SAC (NPWS Site Code 002332)</b> c. 7.5km to the northeast Special Conservation Objectives are set by the NPWS (23 Aug 2016 – Version 1)		
Active raised bogs (7110)  Degraded raised bogs still capable of natural regeneration (7120)	To restore the favourable conservation condition of Active raised bogs in Coolrain Bog SAC. The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established; therefore,	The SAC is hydrologically isolated from the proposed development and sufficiently removed from the footprint of the SAC that adverse impacts on the SAC are not foreseen.  <b>Screened out. No hydrological impact and distance sufficient for no impacts due to works.</b>

<p>Depressions on peat substrates of the Rhynchosporion (7150)</p>	<p>the conservation objective for this habitat is inherently linked to that of Active raised bogs (7110) and a separate conservation objective has not been set in Coolrain Bog SAC.</p> <p>Depressions on peat substrates of the Rhynchosporion is an integral part of good quality Active raised bogs (7110) and thus a separate conservation objective has not been set for the habitat in Coolrain Bog SAC.</p>	
<p><b>River Barrow and River Nore SAC (NPWS Site Code – 002162)</b> c. 10.5km to the northeast and c. 13km downstream Special Conservation Objectives are set by the NPWS (19 July 2011 – Version 1)</p>		
<p><b>Qualifying Interest</b></p>	<p><b>Conservation Objectives</b></p>	<p><b>Connectivity-Source-Pathway-Receptor</b></p>
<p><b>Qualifying Interests: Habitats</b></p> <p>Estuaries [1130]</p> <p>Reefs [1170]</p> <p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>Salicornia and other annuals colonising mud and sand [1310]</p> <p>Atlantic salt meadows (Glaucopuccinellietalia maritimae) [1330]</p>	<p>To maintain the favourable conservation condition of Estuaries in the River Barrow and River Nore SAC.</p> <p>To maintain the favourable conservation condition of the Mudflats and sandflats not covered by seawater at low tide in the River Barrow and River Nore SAC.</p> <p>To maintain the favourable conservation condition of Salicornia and other annuals colonising mud and sand in the River Barrow and River Nore SAC.</p> <p>To restore the favourable conservation condition of Atlantic salt meadows in the River Barrow and River Nore SAC.</p>	<p>The River Barrow and River Nore SAC occurs c. 10.5km to the north-east of the proposed development at its nearest point. The River Nore forms the southern boundary of the proposed development and provides hydrological connectivity to the SAC which occurs c. 13km downstream of the proposed development.</p> <p>Considering the hydrological connectivity between the proposed development and the SAC, and the scale of the proposed solar farm site, it is concluded that , in the absence of mitigation and following the precautionary principal, potential impacts on the River Barrow and River Nore SAC during the construction phase cannot be ruled out.</p> <p><b>Screened in due to potential hydrological connection by reason of surface water flow and the source-pathway-receptor model.</b></p>

<p>Mediterranean salt meadows (Juncetalia maritimi) [1410]</p>	<p>To restore the favourable conservation condition of Mediterranean salt meadows in the River Barrow and River Nore SAC.</p>	
<p>Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]</p>	<p>To maintain the favourable conservation condition of Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation in the River Barrow and River Nore SAC.</p>	
<p>European dry heaths [4030]</p>	<p>To maintain the favourable conservation condition of European dry heaths in the River Barrow and River Nore SAC.</p>	
<p>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</p>	<p>To maintain the favourable conservation condition of Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels in the River Barrow and River Nore SAC.</p>	
<p>Petrifying springs with tufa formation (Cratoneurion) [7220]</p>	<p>To maintain the favourable conservation condition of Petrifying springs with tufa formation (Cratoneurion) in the River Barrow and River Nore SAC.</p>	
<p>Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]</p>	<p>To restore the favourable conservation condition of Old oak woodland with Ilex and Blechnum in the River Barrow and River Nore SAC.</p>	
<p>Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae,</p>	<p>To restore the favourable conservation condition of Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion</p>	

<p>Salicion albae) [91E0]</p>	<p>albae) in the River Barrow and River Nore SAC.</p>	
<p><b>Qualitying Interests: Species</b></p>		
<p>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</p>	<p>To maintain the favourable conservation condition of Desmoulin's whorl snail in the River Barrow and River Nore SAC.</p>	
<p>Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]</p>	<p>The status of the freshwater pearl mussel (Margaritifera margaritifera) as a qualifying Annex II species for the River Barrow and River Nore SAC is currently under review. The outcome of this review will determine whether a site-specific conservation objective is set for this species. Please note that the Nore freshwater pearl mussel (Margaritifera durrovensis) remains a qualifying species for this SAC.</p>	
<p>Austropotamobius pallipes (White-clawed Crayfish) [1092]</p>	<p>To maintain the favourable conservation condition of White-clawed crayfish in the River Barrow and River Nore SAC.</p>	
<p>Petromyzon marinus (Sea Lamprey) [1095]</p>	<p>To restore the favourable conservation condition of Sea lamprey in the River Barrow and River Nore SAC.</p>	
<p>Lampetra planeri (Brook Lamprey) [1096]</p>	<p>To restore the favourable conservation condition of Brook lamprey in the River Barrow and River Nore SAC.</p>	



Lampetra fluviatilis (River Lamprey) [1099]	To restore the favourable conservation condition of River lamprey in the River Barrow and River Nore SAC.	
Alosa fallax fallax (Twaite Shad) [1103]	To restore the favourable conservation condition of Twaite shad in the River Barrow and River Nore SAC.	
Salmo salar (Salmon) [1106]	To restore the favourable conservation condition of Salmon in the River Barrow and River Nore SAC.	
Lutra lutra (Otter) [1355]	To restore the favourable conservation condition of Otter in the River Barrow and River Nore SAC.	
Trichomanes speciosum (Killarney Fern) [1421]	To maintain the favourable conservation condition of Killarney Fern in the River Barrow and River Nore SAC.	
Margaritifera durrovensis (Nore Pearl Mussel) [1990]	To restore the favourable conservation condition of the Nore freshwater pearl mussel in the River Barrow and River Nore SAC.	
<b>Knockacoller Bog SAC (NPWS Site Code – 002333)</b> c. 11km to the east Special Conservation Objectives are set by NPWS (08 Feb 2016 – Version 1)		
<b>Qualifying Interest</b>	<b>Conservation Objectives</b>	<b>Connectivity-Source-Pathway-Receptor</b>
Active raised bogs [7110]	To restore the favourable conservation condition of Active raised bogs in Knockacoller Bog SAC.	Considering the distance removed from the proposed development and the absence of hydrological connectivity between the proposed development and the SAC, adverse impacts on the Knockacoller Bog SAC are not foreseen.
Degraded raised bogs still capable of natural regeneration [7120]	The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established; therefore, the conservation objective for this habitat is inherently linked to that of Active	<b>Screened out. No hydrological impact and distance sufficient for no impacts due to works.</b>

Depressions on peat substrates of the Rhynchosporion [7150]	<p>raised bogs (7110) and a separate conservation objective has not been set in Knockacoller Bog SAC.</p> <p>Depressions on peat substrates of the Rhynchosporion is an integral part of good quality Active raised bogs (7110) and thus a separate conservation objective has not been set for the habitat in Knockacoller Bog SAC.</p>	
<p><b>Island Fen SAC (NPWS Site Code – 002236)</b> c. 14km to the northwest Special Conservation Objectives are set by the NPWS (18 Oct 2018 – Version 1)</p>		
<b>Qualifying Interest</b>	<b>Conservation Objectives</b>	<b>Connectivity-Source-Pathway-Receptor</b>
Juniperus communis formations on heaths or calcareous grasslands [5130]	To maintain the favourable conservation condition of <i>Juniperus communis</i> formations on heaths or calcareous grasslands in Island Fen SAC.	The SAC is hydrologically isolated from the proposed development. Considering the distance removed and the absence of hydrological connectivity between the proposed development and Island Fen SAC, adverse impacts are not foreseen.
Alkaline fens [7230]	To maintain the favourable conservation condition of Alkaline fens in Island Fen SAC.	<b>Screened out. No hydrological impact and distance sufficient for no impacts due to works.</b>
<p><b>Sharavogue Bog SAC (NPWS Site Code – 000585)</b> c. 14.5km to the northwest Special Conservation Objectives are set by the NPWS (02 Nov 2015 – Version 1)</p>		
<b>Qualifying Interest</b>	<b>Conservation Objectives</b>	<b>Connectivity-Source-Pathway-Receptor</b>
Active raised bogs [7110]	To restore the favourable conservation condition of Active raised bogs in Sharavogue Bog SAC.	The SAC is hydrologically isolated from the proposed development. Considering the distance removed from the proposed development and the absence of hydrological connectivity between the SAC and the proposed solar farm site, adverse impacts on the SAC are not foreseen.
Degraded raised bogs still capable of natural regeneration [7120]	The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established; therefore, the conservation objective for this habitat is inherently linked to that of Active raised bogs (7110) and a separate conservation objective has not been set in Sharavogue Bog SAC.	<b>Screened out. No hydrological impact and distance sufficient for no impacts due to works.</b>

Depressions on peat substrates of the Rhynchosporion [7150]	Depressions on peat substrates of the Rhynchosporion is an integral part of good quality Active raised bogs (7110) and thus a separate conservation objective has not been set for the habitat in Sharavogue Bog SAC.	
<b>Lisduff Fen SAC (NPWS Site Code – 002147)</b> c. 15km to the northeast Special Conservation Objectives are set by the NPWS (17 Jan 2019 – Version 1) * indicates a priority habitat under the Habitats Directive		
<b>Qualifying Interest</b>	<b>Conservation Objectives</b>	<b>Connectivity-Source-Pathway-Receptor</b>
Geyer's Whorl Snail <i>Vertigo geyeri</i> [1013]	To restore the favourable conservation condition of Geyer's Whorl Snail in Lisduff Fen SAC.	Considering distance removed from the proposed development and the absence of hydrological connectivity between the site and the SAC, adverse impacts are not foreseen.
Petrifying springs with tufa formation (Cratoneurion) [7220]	To restore the favourable conservation condition of Petrifying springs with tufa formation (Cratoneurion)* in Lisduff Fen SAC.	<b>Screened out. No hydrological impact and distance sufficient for no impacts due to works.</b>
Alkaline fens [7230]	To maintain the favourable conservation condition of Alkaline fens in Lisduff Fen SAC.	

The Stage 1 Screening report in Section 3.6 of the accompanying NIS concludes as follows;

*'In order to determine the potential impacts, if any, of the development of a solar photovoltaic farm at Monaincha, Roscrea, County Tipperary on European Sites, Appropriate Assessment Screening was undertaken. Nine European sites occur within 15km radius of the proposed development, two of which occur downstream of the proposed solar farm site. Those European sites that are Hydrologically isolated from the proposed development are removed from the footprint of the proposed development and are considered to be ecologically isolated from the site. These European sites are screened out of the Appropriate Assessment.*

*The proposed solar farm is however hydrologically connected to the River Nore SPA and the River Barrow and River Nore SAC which both occur downstream*

*of the proposed solar farm site. Considering the scale of the proposed development and the connectivity to either site, it is concluded that potential adverse impacts cannot be ruled out. Both these sites are therefore considered in further detail in Stage 2 Appropriate Assessment.'*

I concur with the conclusion of the Screening Assessment accompanying the planning application and consider that potential adverse impacts cannot be ruled out on the River Nore SPA and the River Barrow and River Nore SAC, due to the hydrological connection between the proposed solar farm and the European Sites, which are located downstream. I also concur that the possibility of significant effects on other European sites can be excluded on the basis of objective information due to the distance of the proposed development from the European Sites or the lack of hydrological connectivity. Thus, the following 7 no. European sites have been screened out for the need for appropriate assessment:

- Slieve Bloom Mountains SPA (004160)
- Slieve Bloom Mountains SAC (000412)
- Coolrain Bog SAC (002332)
- Knockacoller Bog SAC (002333)
- Island Fen SAC (002236)
- Sharavogue Bog SAC (000585)
- Lisduff Fen SAC (002147)

Following the screening process, it has been determined that Appropriate Assessment is required and cannot be excluded on the basis of objective information that the proposed development of a solar farm individually or in-combination with other plans and projects will have a significant effect on the following European sites (i.e. there is the possibility of significant effects):

- River Nore SPA (004233)
- River Barrow and River Nore SAC (002162)

### 9.3. **Stage 2 Appropriate Assessment**

The project is not directly connected with or necessary to the management of a European Site and, therefore, it needs to be determined if the development is likely to have significant effects on a European site.

The proposed development is examined in relation to any possible interaction with European sites designated Special Conservation Areas (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site in view of the conservation objectives of those sites. The conservation objectives and qualifying interests for The River Nore SPA (Site Code 004233), and the River Barrow and River Nore SAC (Site Code 002162) are set out in Section 9.2 of this report. The AA Screening Report 'screens in' these two European sites.

The NIS submitted by the applicant contains a description of the proposed development, the project site and surrounding area. It outlines the methodology used for assessing potential impacts on habitats and species within the European Site that has the potential to be affected by the proposed development. It predicts the potential impacts for the site and its conservation objectives, it suggests mitigation measures, assesses in-combination effects with other plans and projects and it identifies any residual effects on the European sites and their conservation objectives.

Having reviewed the documents submitted, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development alone, or in combination with other plans and projects on European Sites.

### 9.4. **Summary Description of the Proposed Development**

The proposed development comprises a solar farm of c. 142.7ha located on cutover bog and scrub within an existing windfarm. The solar farm comprises the installation of PV panels, mounted on steel support structures, in a series of south-facing arrays arranged horizontally across the site, along with inverters, transformers, cabling, deer fencing, security systems, landscaping and biodiversity enhancements. The lifespan of the project is expected to be 40 years.

## 9.5. Identification of Potential Effect Pathways

The Screening Assessment has identified potential impacts to the River Nore SPA and the River Barrow and River Nore SAC due to the hydrological connectivity between the proposed solar farm development and the European Sites. Given the nature and scale of the proposed construction, operational and decommissioning phases of the works, the potential for effects on surface water quality as a result of suspended solids discharged has been identified in the absence of mitigation.

Assessment of pathways for potential adverse effects on the integrity of the individual Qualifying Interests (QIs) of **the River Nore SPA** are set out below:

<b>River Nore SPA (NPWS Site Code – 004233) c. 4km to the and 4.8km downstream</b>		
<b>Qualifying Interest</b>	<b>Threats</b>	<b>Assessment of Pathways and Potential for Significant Effects</b>
Kingfisher (Alcedo atthis) [A229]	Pressures to riverine systems that support this species include intensive grazing pressure and pressures and threats associated with transport such as paths/tracks, roads/motorways, and bridges/viaducts. Pollution arising from agriculture, forestry and household sewage waste.	Yes. Surface water channels between the proposed development site and the SPA provide a pathway for pollutants to the SPA.  A deterioration in water quality may potentially affect prey species availability for Kingfisher.

Assessment of pathways for potential adverse effects on the integrity of the individual Qualifying Interests (QIs) of **the River Barrow and River Nore SAC** are set out below:

<b>River Barrow and River Nore SAC (NPWS Site Code – 002162) c. 10.5km to the northeast and c. 13km downstream</b>		
<b>Qualifying Interest</b>	<b>Threats</b>	<b>Assessment of Pathways and Potential for Significant Effects</b>
<b>Annex II Habitats</b>		
Estuaries [1130]	Most pressures on this habitat arise from various sources of pollution including domestic wastewater, agriculture and marine aquaculture. Alien invasive species such as the naturalised Pacific oyster ( <i>Magallana gigas</i> ) are also recognised as a significant pressure. The Overall Status of the habitat is Inadequate and deteriorating.	No. The proposed development occurs c. 13km upstream of the upper reaches of the SAC. Estuaries habitats occur in excess of 90km downstream of the proposed solar farm development. Considering the conservation requirements for estuaries and the distance removed downstream of the proposed development, adverse impacts on this habitat are not foreseen.

Mudflats and . not covered by seawater at low tide [1140]	Pressures arising from pollution from agricultural, forestry and wastewater sources, as well as impacts associated with marine aquaculture, particularly the Pacific oyster ( <i>Magallana gigas</i> ). The Overall status of the habitat is Inadequate and deteriorating.	No. Tidal mudflats occur in excess of 110km downstream. Considering the conservation requirements of this habitat, and the distance removed from the development, adverse impacts are not foreseen.
Reefs [1170]	The main pressures on reefs come from fishing methods that damage the seafloor. As a result the Overall Status is inadequate and stable.	No. Reef habitat occur in excess of 100km downstream. Considering the conservation requirements of this habitat, and the distance removed from the development, adverse impacts are not foreseen.
Salicornia and other annuals colonising mud and sand [1310]	Due partly to a change in the threshold for favourable structure and functions, and partly because of a lack of evidence for the recent spread of the invasive non-native species, common cordgrass ( <i>Spartina anglica</i> ), the Overall Status is assessed as Favourable with a stable trend.	No. This coastal habitat is well removed from the footprint of the proposed development and adverse impacts are not foreseen.
Atlantic salt meadows (Glaucopuccinellietalia maritimae) [1330]	Pressures arising from agriculture, including ecologically unsuitable grazing regimes and land reclamation, and the invasive non-native species common cordgrass ( <i>Spartina anglica</i> ). The Overall Status is assessed as Inadequate.	No. Salt marsh habitats occur in excess of 100km downstream of the proposed development. Considering the conservation requirements and the distance removed from the site, adverse impacts are not foreseen.
Mediterranean salt meadows (Juncetalia maritimi) [1410]	Pressures associated with agriculture including overgrazing, under-grazing and land reclamation.	
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	The main problems for river habitat in Ireland are the damage through hydrological and morphological change, eutrophication and other water pollution. While not all variants of the river habitat require low nutrient conditions, this trend is a significant concern. Agriculture and municipal and industrial discharges are the most significant sources of nutrient and organic pollution. The Overall Status of the habitat is Inadequate and deteriorating.	Yes. The locations of this habitat type are not mapped on Site-Specific Conservation Objectives (SSCOs) prepared for the SAC. It is assumed that the River Nore (within the SAC) downstream of the proposed development may potentially support this habitat. It is therefore assumed that this habitat may potentially occur c. 13km downstream of the proposed development.
European dry heaths [4030]	A number of significant pressures were recorded for this habitat, particularly overgrazing by sheep	No. The terrestrial habitat is well removed from the proposed development site

	and burning for agriculture. Both cause habitat degradation and loss through erosion. Afforestation and wind farms are also recognised as problems for dry heath. The Overall Status of dry heath is assessed as Bad and the trend is stable.	and therefore adverse impacts are not foreseen.
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]	Pressures on the habitat include invasive species and agricultural intensification and drainage in the lowlands. The Overall Status is assessed as Bad with deteriorating trend.	No. Although not mapped in the SSCOs prepared for the SAC, the SAC is c. 10.5km from the proposed development. Considering the distance removed from the proposed development, adverse impacts on this habitat are not foreseen.
Petrifying springs with tufa formation (Cratoneurion) [7220]	The main threats facing this habitat type are land reclamation, unsuitable grazing levels, pollution and water abstraction. The Overall Status is assessed as Inadequate.	No. This terrestrial habitat is well removed from the proposed development site and therefore adverse impacts are not foreseen. The nearest petrifying springs are mapped c. 60km to the south-east of the proposed development at its nearest point.
Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	Historical habitat loss has occurred and still continues, although at a very low level. However, the greatest on-going pressures on these woods come from invasive non-native species such as Rhododendron ponticum, cherry laurel ( <i>Prunus laurocerasus</i> ) and beech ( <i>Fagus sylvatica</i> ) and overgrazing by deer. These impacts severely reduce tree regeneration, which is essential for long term viability of woodlands. Measures such as Native Woodland Schemes are expected to have a positive long-term effects but are as yet insufficient to outweigh the pressures as development of Annex-quality woodland takes decades. These pressures, in conjunction with the continued fragmentation of remaining stands, lead to an Overall Status of Bad with a deteriorating trend.	No. This terrestrial habitat is well removed, in excess of c. 60km from the proposed development site and therefore adverse impacts are not foreseen.
Alluvial forests with Alnus glutinosa and Fraxinus	A number of pressures affect this habitat in Ireland, the most serious being invasive species, particularly sycamore ( <i>Acer pseudoplatanus</i> ),	No. Alluvial woodland occurs c. 22km to the east of the proposed development at its nearest point. The



<p>excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</p>	<p>beech (<i>Fagus sylvatica</i>), Indian balsam (<i>Impatiens glandulifera</i>) and currant species (<i>Ribes nigrum</i> and <i>R. rubum</i>). Some native species such as brambles (<i>Rubus fruticosus</i> agg.) and common nettle (<i>Urtica dioica</i>) can also become over-vigorous. Small area losses due to clear felling have also occurred. As a result, the Overall Status is Bad and the trend is declining.</p>	<p>habitat is associated with riverine habitats and occurs c. 32km downstream of the proposed development. Considering the distance removed from the proposed development, adverse impacts on this habitat are not foreseen.</p>
<p><b>Annex II Species</b></p>		
<p>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</p>	<p>The main pressures are associated with natural succession resulting in species composition change and drying out of the habitat. The sites are mainly unmanaged because of their natural wetness, so grazing and mowing are less significant on a national scale and equally should be easily rectified in the short and medium term. The Overall Status of the species is assessed as Inadequate and deteriorating.</p>	<p>No. The nearest population is mapped c. 16km from the proposed development site. Considering the absence of connectivity between the proposed development and the distance removed from the known whorl-snail populations, adverse impacts are not foreseen.</p>
<p>Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]</p>	<p>Habitat deterioration: a combination of hydrological and morphological changes, sedimentation and enrichment. In many rivers, adult mussels have become stressed and are prematurely dying owing to habitat deterioration, while in others, riverbeds have become too clogged with silt, algae and rooted plants for young mussels to survive. The pressures come from a wide variety of source (e.g. pollution from urban wastewater, development activities, farming and forestry), often quite removed from the species habitat. Direct impacts also arise from in-stream works such as channelisation, bridge repairs/ construction and recreational fishery structures. Flow changes, caused by activities such as land drainage, have been highlighted as an important contributor to the species demise. The Overall Status of the species is Bad and deteriorating.</p>	<p>Yes. The proposed development occurs within the Nore <i>Margaritifera margaritifera</i> catchment. The nearest mapped <i>Margaritifera</i> habitat occurs in proximity to Poor Mans Bridge near Abbeyleix, County Laois c. 28.5km downstream of the proposed development.</p>
<p>Austropotamobius pallipes</p>	<p>Crayfish Plague organism threatens the species within six</p>	<p>Yes.</p>

(White-clawed Crayfish) [1092]	catchments. The Overall Status of the species is Bad and deteriorating.	White-clawed Crayfish populations are mapped c. 15km downstream of the proposed development.
Petromyzon marinus (Sea Lamprey) [1095]	Sea lamprey is a Near Threatened species. Barriers to upstream migration (e.g. weirs) are considered the major impediment to good conservation status for sea lamprey as these limit access to spawning beds and juvenile habitat. The Overall Status of this species is assessed as Bad with a stable trend.	Yes. Locations of Lamprey species are not mapped in the SSCOs prepared for the site. Similarly, the locations of know population within the River Nore are also not available. It is therefore assumed that freshwater habitats downstream of the proposed development are capable of supporting lamprey. Using the precautionary principle, it is assumed that a deterioration of water quality downstream of the proposed development may potentially lead to adverse impacts on lamprey species.
Lampetra planeri (Brook Lamprey) [1096]	For brook lamprey in Ireland there are extensive areas of suitable habitat and no significant pressures impacting this species. The Overall Status is therefore assessed as Favourable.	
Lampetra fluviatilis (River Lamprey) [1099]	The inability to distinguish between river lamprey and brook lamprey larvae, and the challenges associated with sampling for adult river lamprey means that an evaluation of their actual range and population size cannot be undertaken. The Overall Status for river lamprey is therefore assessed as Unknown.	
Alosa fallax fallax (Twaite Shad) [1103]	Habitat extent is considered adequate to carry a larger population than currently recorded. However, there are concerns regarding habitat quality, especially at spawning sites. A number of pressures were identified, mainly relating to pollution, alteration of flow patterns, and habitat disturbance. Furthermore, barriers to migration, such as weirs, can impede or prevent twaite shad accessing spawning habitat, and can also increase the potential for hybridisation between converging populations of twaite and Allis shad simultaneously obstructed below barriers. The Overall Status of this species is assessed as Bad with a stable trend.	No. The Twaite Shad spends almost its entire life in estuarine habitats, migrating upstream to spawn. The proposed development is well removed from the recognised range and distribution of the species and therefore significant adverse impact are not foreseen.
Salmo salar (Salmon) [1106]	There is considered to be sufficient habitat in Ireland to support a viable salmon population. Freshwater quality in Ireland	Yes. The rivers downstream of the proposed development are considered capable of supporting

	continues to remain a concern but ongoing pressures linked with habitat quality are not considered to be compromising the viability of the species. The overall Status is assessed as Inadequate.	salmon. A deterioration of water quality downstream arising from the proposed development may potentially lead to adverse impacts on this species.
Lutra lutra (Otter) [1355]	Although recent studies on territory overlaps and animal movements suggests that refinements to the population estimation formula are needed, the otter population (estimated at between 7,000 and 10,000 breeding females) is considered to be increasing and none of the threats or pressures identified are considered likely to impact significantly on the species. The Overall Status of otter is therefore considered to be Favourable.	Yes. River habitats downstream of the proposed development are capable of supporting this Annex IV listed species. Whilst the banks of the River Nore in proximity to the proposed development are unlikely to support otter holts or resting spots, the river provides suitable commuting/foraging habitat for otter.
Trichomanes speciosum (Killarney Fern) [1421]	The pressures identified are generally local issues and none were considered to be impacting on the long-term viability of the species or its habitat. The problem of invasive non-native species, identified at a number of sites, is difficult to manage as they often provide essential cover to Killarney fern colonies. The Overall Status of the species is Favourable.	No. Nearest population mapped in the SCCOs prepared for the site occur c. 70km to the southeast of the proposed development.
Margaritifera durrovensis (Nore Pearl Mussel) [1990]	Previously, the River Nore Pearl Mussel ( <i>Margaritifera durrovensis</i> ) was reported separately, however genetic research has since placed the Nore population within the <i>Margaritifera margaritifera</i> taxon (NPWS, 2019b). The SSCOs prepared for the SAC have not been revised to take account of this, however both Nore Pearl Mussel and Freshwater Pearl Mussel are assessed collectively in this assessment.	

There will be no direct effects as the proposed development is located entirely outside the designated European Sites. In the absence of mitigation measures, the potential indirect effects on European sites is uncertain, thus Stage 2 AA is required for the following European Sites:

- **River Nore SPA**
- **River Barrow and River Nore SAC**

Considering the scale of the proposed development and the hydrological connectivity to the River Nore SPA and River Barrow and River Nore SAC downstream, it has been

determined that, in the absence of mitigation, significant adverse impacts on the integrity of the SPA and SAC cannot be ruled out. Considering the surface water connectivity between the proposed solar farm development and the European sites, the potential for water quality impacts arising from the proposed development must be considered further in this assessment.

Potential pathways for indirect effects on the Qualifying Interests were identified and are listed as follows:

- Kingfisher (*Alcedo atthis*) [A229]
- Water courses of plain to montane levels with the *Ranunculus fluitans* and *Callitriche-Batrachion* vegetation [3260]
- *Margaritifera margaritifera* (Freshwater Pearl Mussel) [1029]
- *Margaritifera durrovensis* (Nore Pearl Mussel) [1990]
- *Austropotamobius pallipes* (White-clawed Crayfish) [1092]
- *Petromyzon marinus* (Sea Lamprey) [1095]
- *Lampetra planeri* (Brook Lamprey) [1096]
- *Lampetra fluviatilis* (River Lamprey) [1099]
- *Salmo salar* (Salmon) [1106]
- *Lutra lutra* (Otter) [1355]

## 9.6. Preventative Measures to Avoid Identified Effects/Pathways

### 9.6.1. Construction Phase

A Construction Environmental Management Plan (CEMP) has been prepared for the site and was submitted as part of the application documentation. It is noted that no new access tracks are proposed as existing roads constructed from Monaincha Wind Farm will be utilised to facilitate the proposed solar farm development. It is also noted that areas of high ecological interest will remain free from development. These areas include the grassland area within the southern parts of the site that bounds the River Nore, and the overlap with the Monaincha Bog/Ballaghmore Bog NHA (NPWS Site Code:00652) that occurs within the northern extent of the site.

The following measures are proposed in order to mitigate against potential adverse potential water quality impacts on the conservation status of the River Nore SPA and the River Barrow and River Nore SAC. Prior to undertaking of any construction stage of the proposed development, the following proposed mitigation measures shall be implemented:

- An Ecological Clerk of Works (ECoW) should be employed to monitor the performance of prescribed mitigation measures.
- Infrastructure will be confined to the footprint of the proposed development. Wet bog woodland, the overlap with the Monaincha Bog/Ballaghmore Bog NHA, and grassland north of the River will be avoided by the development.
- The construction compound is located in a suitable area, removed from the River Nore, and other natural watercourses. A small temporary 0.5m wide x 0.5m high earthen bund shall be formed along the boundary of the works compound.
- Pollution mitigation measures for the site shall be implemented in accordance with best practice guidelines including CIRIA C532 – Control of Water Pollution from construction sites – Guidance for Consultants & Contractors – CIRIA 2001 and Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects 2006.
- A 60m buffer zone along the southern boundary of the site adjacent to the River Nore will be retained, whilst a 15m wide buffer zone along the eastern boundary from the Ballaghmore Upper River and western boundary from the unnamed stream.
- A 2m wide access strip buffer zone shall be provided adjacent to all drainage ditches field boundaries, no solar farm components or any other ancillary works shall be undertaken within this buffer zone.
- Sediment control measures (check dams, silt traps, silt curtains etc) will be implemented to minimise any run-off of sediment laden waters during construction works. Details and locations of these measures are presented in the CEMP prepared for the proposed development.

- Silt protection proposed for the construction phase of the proposed development includes the use of a four-stage pollution mitigation control measure. This measure will be incorporated along the entire buffer zone adjacent to the River Nore. The specifications for the four-stage pollution control measure are presented in the CEMP prepared for the site.
- The four-stage pollution control measure is designed to prevent any silt-laden water discharging to the river Nore along the southern site boundary, the Ballaghmore Upper Stream that occurs along the eastern boundary, and the unnamed stream along the western boundary of the proposed development site.
- Sediment control measures will also be included for drainage channels that occur within the site, further details of this are presented in the CEMP prepared for the proposed development. Straw bales and silt fencing will be placed just upstream and downstream of any location where existing access tracks cross drainage ditches and just upstream of the 15m wide buffer zone adjacent to the River Nore, Ballaghmore Upper Stream and the unnamed stream, at locations where drainage ditches may discharge to these watercourses. These mitigation measures shall remain in place until completion of all construction and commission works and will be inspected on a regular basis by the ECoW. It is not envisaged that straw bales and silt fencing will need replacing during the duration of construction works. If silt fencing or straw bales are to be replaced, they will be removed under the supervision of the on-site ecological supervisor.
- Secondary and additional pollution control measures to all the existing drainage ditches that traverse the site are also required. Straw bales will be placed at strategic locations within each of the drainage ditches. Straw bales and silt fencing will be placed just upstream of the 15m buffer zone adjacent to the River Nore, the Ballaghmore Upper River and unnamed stream. Further details on secondary pollution control measures are detailed in the CEMP that accompanies the application.

- Long term silt protection measures are incorporated in the surface water management regime on the site and therefore will continue to function during the operational phase of the proposed development.
- All drainage ditches within and adjacent to the boundary of the site, the reach length of the River Nore that bounds the southern boundary of the site, the reach length of the Ballaghmore Upper Stream that bounds the eastern boundary of the site, and the unnamed stream that bounds the western boundary of the site to be visually inspected on a bi-annual basis and additionally following the occurrences of any significant or extreme floods.
- Stockpiling of materials during construction will only occur in suitably designated areas away from watercourses with adequate measures taken to prevent any surface water run-off. Where it is deemed necessary, silt traps and silt curtains will be employed to safeguard the protection of watercourses in the vicinity of the proposed works.
- The grassland area that adjoins the River Nore will be retained as a buffer zone between the proposed development and the river.
- No plant/machinery shall enter within 100m of the River Nore during or following heavy rain or other conditions likely to lead to large-scale or additional water flow that would carry siltitious material into the river.
- No fuels, oils or chemicals will be stored within the construction compound. Fuel will only be brought to site via mobile fuel bowser. For any liquid other than water, this shall include storage in suitable tanks and containers which shall be housed in the designated area surrounded by bund walls of sufficient height and construction so as to contain 110% of the total contents of all containers and associated pipework. The floor and walls of bunded areas shall be impervious to both water and oil. The pipes should vent downwards into the bund.
- Refuelling of machinery will only be carried out in designated areas removed from any watercourses. Plant and vehicles will be inspected regularly for leaks. Drip trays will be fitted to all plant machinery. The location of the refuelling area

is presented in the CEMP. Re-fuelling requirements are detailed further in the CEMP prepared for the proposed development.

- A Class 1 Hydrocarbon Bypass Interceptor shall be located upstream of the works compound surface water run-off discharge location to an existing ditch. All Surface water run-off from the construction works compound shall discharge through the Bypass Interceptor. A silt trap manhole will be provided just upstream of the Bypass Interceptor. Surface water run-off from the works compound shall discharge through the silt trap manhole prior to discharge through the Bypass Interceptor.
- In-stream works and watercourse crossings are not proposed. Should the need for watercourse crossings or in-stream works arise then early engagement with inland Fisheries Ireland is required to agree methodology and associated mitigation as required.
- All liquids, solids and powder containers will be clearly labelled and stored in sealable containers.
- Spill kits will be provided in areas where liquids are stored and refuelling area.
- All small plant will be positioned as far as practicable from watercourses. All small plant such as generators and pumps will be stood in drip trays capable of holding 110% of their tank contents.
- Waste oils, empty oil containers, and other hazardous wastes will be disposed of in accordance with the requirements of the Waste Management Act 1996.
- The delivery point for concrete will be within the bunded designated area. This will prevent potential concrete spillage from truck mixers contaminating the ground and leaching out into the groundwater. Compressors or generators used for connecting operations will be fitted with drip trays to collect fuel and oil spills that might otherwise contaminate the groundwater and lead to pollution of the watercourses.
- Concrete delivery vehicles will be precluded from washing out at or in the environs of the site, or at such location as would result in a discharge to surface waters.



- The design of the surface management plan will maintain the existing drainage regime as reasonably as possible. Drainage design, earthworks, and environmental measures shall at all times ensure that the water quality and water levels of the on-site drainage channels are not adversely affected. Drainage designs are illustrated on the Drainage and Environmental drawings prepared for the northern and southern arrays of the proposed development.
- There will be no discharge of effluent to ground water or surface water during the construction phase. All wastewater from the construction facilities will be stored before removal off-site for disposal and treatment – temporary toilet facilities only shall be used on site.
- A regular review of weather forecasts for heavy rainfall will be required and the contractor will be required to prepare a contingency plan for before and after such events.
- The spread and introduction of invasive species and noxious weeds will be avoided by adopting appropriate mitigation measures as per guidance issued by the NRA (2010). Invasive species management is detailed in the Landscape Management plan in Appendix XVII of the planning application submission.

Qualifying interests at risk relate to aquatic species which can only be impacted by water pollution. I am satisfied that the mitigation measures proposed as outlined above will be effective in mitigating /addressing water pollution. Furthermore, the separation distances between the site and the qualifying interests are such that in the unlikely event that a pollution episode were to occur, the assimilative capacity of the river together with the separation distance would allow adequate dilution and dispersion to ensure that the Qualifying Interests would not be affected.

<b>Appropriate Assessment Summary Matrix</b>		
<b>River Nore SPA (NPWS Site Code – 004233) c. 4km to the east and 4.8km downstream</b>		
<b>Qualifying Interest Feature</b>	<b>Potential Adverse Effects</b>	<b>Mitigation Measures</b>
Kingfisher (Alcedo atthis) [A229]	The potential for water quality deterioration may arise during construction	Direct impacts on the Kingfisher population are unlikely due to the distance from the SPA. Mitigation measures outlined in

	and decommissioning phase of the proposed development.	Section 9.6.1 of this report will ensure water quality deterioration will not arise from the proposed development, and hence no impact on fish biomass in downstream watercourses, which the kingfisher is dependent on for feeding.
<b>In combination effects</b>		None
<b>Can adverse effects on integrity be excluded?</b>		Yes
<b>Overall Conclusion: Integrity test</b>		
Following the implementation of mitigation, the construction and operation of this proposed development will not affect the integrity of this European Site and no reasonable doubt remains as to the absence of such effects.		
<b>River Barrow and River Nore SAC (NPWS Site Code – 002162)</b> c. 10.5km to the northeast and c. 13km downstream		
<b>Qualifying Interest Feature</b>	<b>Potential Adverse Effects</b>	<b>Mitigation Measures</b>
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]	The main pressures and threats to river habitats in Ireland are damage arising from hydrological and morphological change, eutrophication, and other water pollution. The potential for water quality deterioration may arise during construction and decommissioning phase of the proposed development.	The locations of this habitat type are not mapped on Site-Specific Conservation Objectives (SSCOs) prepared for the SAC. It is assumed that the River Nore (within the SAC) downstream of the proposed development may potentially support this habitat. It is therefore assumed that this habitat may potentially occur c. 13km downstream of the proposed development. Due to the separation distance of 13km from the site, direct impacts are unlikely. In addition, the Mitigation measures outlined in Section 9.6.1 of this report will ensure water quality deterioration will not arise from the proposed development.
<b>In combination effects</b>		None
<b>Can adverse effects on integrity be excluded?</b>		Yes
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	The species is critically endangered in Ireland and Europe. The potential run-off of silts and other harmful pollutants could have significant adverse impacts on water quality downstream of the proposed development.	Suitable Pearl Mussel habitat is mapped in excess of 28km downstream of the proposed development and hence direct impacts are unlikely due to the distance from the Qualifying Interest. In addition no in-stream water works are proposed and no alteration of flow within affected watercourses is foreseen. New drainage within the proposed development site will be minimal and therefore no significant alteration in flow in downstream watercourses are foreseen. Mitigation Measures outlined in Section 9.6.1 of this report will ensure water quality deterioration will not arise from the proposed development.
Margaritifera durrovensis (Nore Pearl Mussel) [1990]		
<b>In combination effects</b>		None
<b>Can adverse effects on integrity be excluded?</b>		Yes
Austroptamobius pallipes (White-	The potential for water quality deterioration may arise during construction	In order to maintain the favourable conservation condition of this species

clawed Crayfish) [1092]	and decommissioning phase of the proposed development.	water quality, maintaining at least Q3-4 q-values is required. Mitigation Measures outlined in Section 9.6.1 of this report will ensure water quality deterioration will not arise from the proposed development.
<b>In combination effects</b>		None
<b>Can adverse effects on integrity be excluded?</b>		Yes
Petromyzon marinus (Sea Lamprey) [1095]	The potential for water quality deterioration may arise during construction and decommissioning phase of the proposed development.	Mitigation Measures outlined in Section 9.6.1 of this report will ensure water quality deterioration will not arise from the proposed development.
Lampetra planeri (Brook Lamprey) [1096]		
Lampetra fluviatilis (River Lamprey) [1099]		
<b>In combination effects</b>		None
<b>Can adverse effects on integrity be excluded?</b>		Yes
Salmo salar (Salmon) [1106]	A deterioration of water quality downstream arising from the proposed development may potentially lead to adverse impacts on this species.	Good water quality is listed as an attribute necessary to restore the favourable conservation condition of this species. A q-value of at least Q4 is required to restore the conservation condition of salmon. Mitigation Measures outlined in Section 9.6.1 of this report will ensure water quality deterioration will not arise from the proposed development.
<b>In combination effects</b>		None
<b>Can adverse effects on integrity be excluded?</b>		Yes
Lutra lutra (Otter) [1355]	River habitats downstream of the proposed development can support this Annex IV listed species. Whilst the banks of the River Nore in proximity to the proposed development are unlikely to support otter holts or resting spots, the river provides suitable commuting/foraging habitat for otter	Otters are likely to use the River Nore along the southern boundary of the site for commuting and or foraging. Consider the distance removed from the proposed development, it is highly unlikely that there will be direct impacts on the otter populations in the River Barrow and River Nore.
<b>In combination effects</b>		None
<b>Can adverse effects on integrity be excluded?</b>		Yes
<b>Overall Conclusion: Integrity test</b>		
Following the implementation of mitigation, the construction and operation of this proposed development will not affect the integrity of this European Site and no reasonable doubt remains as to the absence of such effects.		

### 9.6.2. **Operational Phase**

No adverse impacts during the operational phase of the proposed development are expected. There will be no significant sources of environmental emissions that could impact air/water/land arising from the operation phase. The design of the on-site drainage regime and surface water management plan will ensure no adverse impacts on downstream hydrology or water quality.

### 9.6.3. **Decommissioning Phase**

Any demolition or maintenance works on the site would be likely to have similar effects in terms of disturbance of water quality to those associated with the construction phase of the project. For this reason, best practice environmental control measures proposed under the construction phase and referred to in the suite of mitigation measures above should address this and should also be adhered to during the decommissioning to avoid any potential for deterioration in water quality.

### 9.7. **In-Combination/ Cumulative Impacts**

No potentially significant cumulative and/ or in-combination pollution, disturbance, displacement or habitat loss effects on any of the Qualifying Interests have been identified with regard to the proposed development as there are no other projects in the vicinity that could give rise to in-combination effects in conjunction with the proposal. With the implementation of the mitigation measures, the proposed development either alone or in-combination with other plans and projects will not adversely affect the relevant European Sites, having regard to the sites Conservation Objectives.

### 9.8. **Applicants NIS Conclusion**

The applicants NIS concluded as follows;

*'In order to determine the potential impacts, if any, of the development of a solar photovoltaic farm and associated infrastructure at Monaincha, Roscrea, County Tipperary, Appropriate Assessment was undertaken. Nine European sites occur within a 15km radius of the proposed development, two of which are hydrologically connected downstream of the proposed development. It is considered that those*

*European sites that are not hydrologically linked downstream of the proposed development will not be adversely affected by the proposed solar farm, owing to the distance from the site, and the absence of a corridor for connectivity.*

*Two European sites occur downstream of the proposed development along the River Nore, the River Nore SPA, and the River Barrow and River Nore SAC that occur c. 4.98km and 13km downstream of the proposed development, respectively. It is considered that due to the scale of the proposed development and the direct hydrological connectivity to both European sites, that in the absence of mitigation, potential adverse impacts on the River Nore SPA and the River Barrow and River Nore SAC are possible. A series of mitigation measures and recommendations are proposed above which will ensure that impacts on these European sites will not arise.*

*Taking into account all matters discussed and provided that the mitigation measures and recommendations are adopted, it is concluded that the proposed solar farm development at Monaincha, either alone or in combination with other plans or projects, will not adversely affect (either directly or indirectly) the integrity and conservation status of the River Nore SPA and the River Barrow and River Nore SAC in view of the conservation objectives for the sites in light of best scientific evidence, and there is no reasonable scientific doubt in relation to this conclusion.'*

I concur with the conclusion of the NIS accompanying the planning application. I concur that the possibility of significant effects on seven European sites within a 15km radius can be excluded on the basis of objective information due to the distance of the proposed development from the European Sites or the lack of hydrological connectivity. Two European sites are hydrologically linked to the proposed site. I consider the mitigation measures recommended are adequate to protect the Qualifying Interests of the River Nore SPA and the River Barrow and River Nore SAC. I concur that there is no reasonable scientific doubt in relation to the conclusion.

#### **9.9. NIS Conclusion**

I am satisfied that an examination of the potential impacts has been analysed and evaluated using the best scientific knowledge. Significant effects on Natura 2000 sites were identified. Where potential adverse effects were identified, key design features are prescribed to remove risks to the integrity of the European sites. Taking into

consideration the extensive mitigation measures detailed in the planning application documentation and Section 9.6.1 of this report, based on best scientific evidence, there are no predicted impacts from the proposed project in isolation or in-combination impacts on the River Nore SPA (004233) and River Barrow and River Nore SAC (002162).

I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the River Nore SPA (004233) and River Barrow and River Nore SAC (002162) or any other European site, in view of the site's Conservation Objectives.

## 10.0 Recommendation

Having regard to the nature of the condition, the subject of the appeal and based on the reasons and considerations set out below, I am satisfied that the determination by the Board of this application as if it had been made to it in the first instance would not be warranted. Accordingly, I consider that it would be appropriate to use the provisions of Section 139 of the Planning and Development Act (as amended) to **amend Condition 2.**

I recommend that Condition 2 be amended as follows:

The structures shall be removed at the expiration of a period of 40 years from the date of commissioning of the development unless planning permission for a further period has been granted.

**Reason: To enable the planning authority to review the operation of the solar farm having regard to the circumstances then prevailing.**

## 11.0 Reasons and Considerations

The provision of renewable energy and energy security is a European and National priority as outlined in the following policy;

- The REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022;

- Energy Security in Ireland to 2030, Energy Security Package, Nov. 2023
- The European Green Deal 2020;
- The Policy Statement on Security of Electricity Supply, 2021;
- The National Climate and Energy Plan 2021-2030 (NCEP);
- The Climate Action Plan 2023 (CAP 2023);
- National Planning Framework 2018-2040 (NPF);
- The National Development Plan 2021-2030;
- Regional Spatial and Economic Strategy for the Southern Region (2020);
- The Tipperary County Development Plan 2022 – 2028;

Having regard to the nature of solar farms and the limited operational impacts arising from them, it is not considered necessary to review the technology in 25 year's time. Therefore, the need to provide for an operational life of 40 years is considered acceptable.

### **Appropriate Assessment: Stage 1:**

The Board considered the Screening Report for Appropriate Assessment and carried out an appropriate assessment screening exercise in relation to the potential effects of the proposed development on designated European sites. The Board noted that the proposed development is not directly connected with or necessary for the management of the following European Sites;

- Slieve Bloom Mountains SPA (004160)
- Slieve Bloom Mountains SAC (000412)
- Coolrain Bog SAC (002332)
- Knockacoller Bog SAC (002333)
- Island Fen SAC (002236)
- Sharavogue Bog SAC (000585)
- Lisduff Fen SAC (002147)

The Board agreed with the screening report submitted with the application and with the screening exercise carried out by the Inspector. The Board concluded that, having regard to the qualifying interests for which the sites were designated and in the absence of connections to and distance between the application site, Slieve Bloom Mountains SPA (004160), Slieve Bloom Mountains SAC (000412), Coolrain Bog SAC (002332), Knockacoller Bog SAC (002333), Island Fen SAC (002236), Sharavogue Bog SAC (000585), Lisduff Fen SAC (002147) could be screened out from further consideration and that the proposed development, individually or in combination with other plans or projects would not be likely to have significant effects on these European Sites or any other European Site in view of the sites' conservation objectives and that a Stage 2 appropriate assessment is therefore not required in relation to these European Sites.

The Board considered that an appropriate assessment of the implications of the proposed development for the River Nore SPA (004233) and the River Barrow and River Nore SAC (002162) required further investigation.

#### **Appropriate Assessment: Stage 2:**

The Board considered the Natura Impact Statement and carried out an appropriate assessment of the implications of the proposed development for the River Nore SPA (004233) and the River Barrow and River Nore SAC (002162). The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment as well as the report of the Inspector. In completing the assessment, the Board considered the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects, the mitigation measures which are included as part of the current proposal and the Conservation Objectives for these European Sites. In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Sites, having regard to the sites' Conservation Objectives. In overall conclusion, the Board was satisfied that the proposed development would not adversely affect the integrity of the River Nore SPA



(004233) and the River Barrow and River Nore SAC (002162) or any other European Site in view of the sites' Conservation Objectives.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

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Laura Finn

Planning Inspector

22<sup>nd</sup> November 2023

## Appendix 1

### Form 1 EIA Pre-Screening

[EIAR not submitted]

<b>An Bord Pleanála Case Reference</b>	<b>ABP-315975-23</b>		
<b>Proposed Development Summary</b>	Amendment to the design of the previously approved development (Planning Reference: 21261), which comprises consent for a 10 year period to construct and a 40 year period to operate a 142.7 hectare Solar PV Energy Development.		
<b>Development Address</b>	Monaincha Townland, Roscrea, Co. Tipperary		
<b>1. Does the proposed development come within the definition of a 'project' for the purposes of EIA?</b> <small>(that is involving construction works, demolition, or interventions in the natural surroundings)</small>		<b>Yes</b>	✓
		<b>No</b>	
<b>2. Is the proposed development of a class specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) or does it equal or exceed any relevant quantity, area or limit where specified for that class?</b>			
<b>Yes</b>		Class .....	EIA Mandatory EIAR required
<b>No</b>	✓		Proceed to Q.3
<b>3. Is the proposed development of a class specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) but does not equal or exceed a relevant quantity, area or other limit specified [sub-threshold development]?</b>			
		<b>Threshold</b>	<b>Comment (if relevant)</b>
		N/A	<b>Conclusion</b>
<b>No</b>			
<b>Yes</b>	✓	Class 1 of Part 2 of Schedule 5, (a) Projects for the restructuring of rural land holdings, where the length of field boundary	Proceed to Q.4

		to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.		
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<b>4. Has Schedule 7A information been submitted?</b>		
<b>No</b>		<b>Preliminary Examination required</b>
<b>Yes</b>	✓	<b>Screening Determination required</b>

## Appendix 2

### Form 2 EIA Preliminary Examination

<b>An Bord Pleanála Case Reference</b>	<b>ABP-315975-23</b>	
<b>Proposed Development Summary</b>	Amendment to the design of the previously approved development (Planning Reference: 21261), which comprises consent for a 10 year period to construct and a 40 year period to operate a 142.7 hectare Solar PV Energy Development.	
<b>Development Address</b>	Monaincha Townland, Roscrea, Co. Tipperary	
<p>The Board carries out a preliminary examination [Ref. Art. 109(2)(a), Planning and Development Regulations 2001 (as amended)] of, at least, the nature, size or location of the proposed development having regard to the criteria set out in Schedule 7 of the Regulations.</p> <p>In addition, the Planning and Development (Amendment) (No. 2) Regulations 2023 (S.I. 383 of 2023) requires from 1st August 2023 that Projects for the restructuring of rural land holdings are screened for the purposes of Environmental Impact Assessment, as follows:</p> <p>Amendment of Schedule 5, Part 2, Class 1 of the Principal Regulations is amended: (a) By the insertion of the following before paragraph (c):</p> <p>(a) Projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.</p>		
	<b>Examination</b>	<b>Yes/No/ Uncertain</b>
<b>Nature of the Development</b> Is the nature of the proposed development exceptional in the context of the existing environment?	The solar site is located within the Monaincha Wind Farm, which comprises 15 turbines and has been operational since 2013. The proposed solar farm has an overall site area of 142.7ha contained within one overall landholding. The site was formerly used for peat extraction and is mainly a cutaway bog with a smaller percentage of agricultural land.	No

<p>Will the development result in the production of any significant waste, emissions or pollutants?</p>	<p>Previously consented solar farms in the area located 350m from the subject site at 'The Sheehys' which comprises c. 58ha (PI Ref 16/600917 &amp; ABP 249060) and a further approved solar farm at Derrymore located c. 2.8km away (PI Ref. 19601323). As the site is located in an existing windfarm, a renewable energy development in the form of a solar farm is not exceptional in the context of the existing environment.</p> <p>There is no boundary removal proposed and the development will not result in significant emissions or pollutants to the environment.</p> <p>It is anticipated that limited waste will be produced during the construction process and the majority of earthworks will be backfilled or used for levelling within the site. There is likely to be general construction material waste which will be taken from site and disposed of in line with applicable requirements. No waste will be stored on site during construction. There is no waste produced during the operation phase. The construction process for the Solar Farm is c. 6 months, with only management and intermittent maintenance of the site required during the operation phase of the project.</p>	
<p><b>Size of the Development</b> Is the size of the proposed development exceptional in the context of the existing environment?</p> <p>Are there significant cumulative considerations having regard to other existing and/or permitted projects?</p>	<p>The scale of development is exceptional in the context of surrounding development, but not exceptional for solar energy developments.</p> <p>It is not considered that there is any likelihood of significant cumulative effects with other existing or permitted developments in the area.</p>	<p>No</p>
<p><b>Location of the Development</b> Is the proposed development located on, in, adjoining or does it have the potential to significantly impact on an</p>	<p>Nine European sites occur within a 15km radius of the proposed development, two of which are hydrologically connected downstream of the proposed development.</p> <p>The two Natura 2000 sites hydrologically linked include:</p>	<p>No</p>

<p>ecologically sensitive site or location?</p> <p>Does the proposed development have the potential to significantly affect other significant environmental sensitivities in the area?</p>	<p>The River Nore SPA (Site Code 004233) – c. 4km to the east and 4.8km downstream.</p> <p>The River Barrow and River Nore SAC (Site Code 002162) – c. 10.5km to the north-east and 13km downstream.</p> <p>There are two NHA's located within close proximity to the site, the Monaincha Bog/Ballaghmore Bog NHA (Site Code:000652) lies within one kilometre to the north and the Nore Valley Bogs NHA (Site Code: 001853) is located c. 2km to the south.</p> <p>The application was accompanied by an NIS, which concludes that having regard to the nature of the proposed works, the distance of the subject site from these sites, the proposed mitigation in relation to water quality, significant effects on the environment are not likely.</p>	
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**Conclusion**

<p><b>There is no real likelihood of significant effects on the environment.</b></p> <p>EIA not required.</p>	<p><del><b>There is significant and realistic doubt regarding the likelihood of significant effects on the environment.</b></del></p> <p><del>Schedule 7A Information required to enable a Screening Determination to be carried out.</del></p>	<p><del><b>There is a real likelihood of significant effects on the environment.</b></del></p> <p>EIAR required.</p>
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Inspector:     Laura Finn    

Date:     22/11/2023    

DP/ADP: \_\_\_\_\_ Date: \_\_\_\_\_

(only where Schedule 7A information or EIAR required)