

Inspector's Report ABP-318433-23

Development 10 year planning permission for a

solar PV energy development. A

Natura Impact Statement (NIS) has

been submitted to the planning authority with the application.

Location On lands within the townlands of

Castlegarden and Cloghscregg, Thomastown, County Kilkenny

Planning Authority Kilkenny City & County Council

Planning Authority Reg. Ref. 2360069

Applicant(s) Lightsource Renewable Energy

Ireland Ltd.

Type of Application Permission

Planning Authority Decision Grant with conditions

Type of Appeal Third Party

Appellant(s) Susan Mosse & others

Observer(s) Ciara Bergin

Martina Brennan

Margaret Coughlan

Joe Hoban

Valerie Brennan

Sandra McCarthy

Clyde Meyler

Christopher O'Reilly

Sarah Houlihan

Adrian & Susan Lanigan

Michael Wright

Kathleen Doherty

Michael Bergin

Pat O'Keeffe

Paul & Su Brown

Joan & Joe Bolger

Joan & Bob Cahill

Liam Aylward

Don Doherty

Rowan Brennan & Ciara Stapleton

Eamonn Holohan

Kristof Hoek

Willem Hoek

Jimmy Collier

Eoin Prendergast

Kilian Prendergast

Hugh Prendergast

Christy Nolan

Date of Site Inspection

16th May 2024

Inspector

Liam Bowe

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1.0 Site Location and Description

- 1.1. The subject site comprises of a stated area of 103.64 ha. located at Castlegarden and Cloghscregg, Thomastown, Co. Kilkenny. The lands are located approx. 4.2km to the northeast of Thomastown and approx. 8.4km to the west of Graiguenamanagh. The lands are bounded by the L4205 local road along the south side with the R703 regional road located approx. 320m to the southeast of the proposed southern access to the site. The lands can also be accessed from a local road that runs along part of the northern boundary of the subject site. The lands are undulating with varying elevations between approx. 63m and 181m OD.
- 1.2. The subject site comprises 45 fields or parts of fields. The lands are generally in grassland with four of the fields more recently in forestry use. The layout of the site is irregular and generally divided into two development areas north and south:
 - The northern portion of the site comprises Field 1 to 32. Twenty-eight of the fields are in use for grazing/ meadows and the other four have been deforested. These lands generally fall from east to west.
 - The southern portion of the site comprises Field 33 to 45, north of the R703 regional road. These field are in use for grazing and generally fall from the north to the south.
- 1.3. Field boundaries are generally mature hedgerows, although there are a number of places along internal field boundaries where hedgerows are weak/ not present e.g., along the eastern boundaries of Field no.'s 20, 28 and 29. There is a house and farmyard located at the northern part of the overall application site, but these are excluded from the current application site boundary. Similarly, there is a farmyard bounding the appeal site at its south westernmost point, but this is also excluded from the appeal site boundary. A 110kv electricity transmission line dissects the site along a north-south axis.
- 1.4. Surrounding land uses include agriculture, predominantly pasture, and a significant amount of forestry immediately adjacent to the appeal site. There are a number of residential properties adjoining the lands to the north of the appeal site and a number of residences to the south.

2.0 **Proposed Development**

- 2.1. It is proposed to construct of a Solar PV development of 64MW, and all associated site works. The proposed solar farm, which will connect to the national grid on the lands. includes:
 - Photovoltaic panels on ground mounted steel frames,
 - Associated electrical inverters and transformer stations.
 - Electrical and communications cabling,
 - Site entrances and on-site access tracks,
 - Battery energy storage facility,
 - Temporary construction compounds,
 - · Boundary security fencing and gates,
 - · Pole mounted security cameras, and
 - All associated site development, landscaping and reinstatement works.
- 2.2. The application is accompanied by a Planning Statement, an Environmental Impact Assessment Screening Report, an Outline Construction Environmental Management Plan, a Construction Traffic Management Plan, a Natura Impact Statement, a Noise Impact Assessment, an Ecological Appraisal, a Biodiversity Management Plan, Flood Risk and Drainage Impact Assessment, a Landscape and Visual Impact Appraisal, a Glint and Glare Assessment, an Archaeological Geophysical Survey, a Statement of Community Involvement, and maps and drawings.
- 2.3. A grid connection is not part of this application.

3.0 Planning Authority Decision

3.1. Further Information Request

- 3.1.1. Prior to making a decision on the planning application, the planning authority sought further information from the applicants on 20th April 2023, including details in respect of the following:
 - A detailed drainage plan,

- An addendum to the NIS,
- Photographs of the viewpoints from dwellings listed in the glint and glare assessment,
- Confirmation that the proposed CCTV cameras will not negatively impact on or compromise residential amenity and privacy for nearby receptors,
- Details of piling of the solar panel frame bases,
- An analysis of the watercourses that run through the development site as part of a hydrological survey,
- A detailed method statement for the installation of watercourse crossings/ culverts for the development,
- Clarification of gasses or liquids to be used in the transformers,
- Carry out measured background noise rather than predicted background noise.
- A detailed decommissioning plan,
- A reassessment of the L4250, L8212 and L82121 local roads to ensure there are sufficient passing areas to cater for peak construction traffic,
- An Archaeological Impact Assessment to clarify if the anomalies identified during the geophysical survey are archaeological in nature, and
- Revised proposals for additional landscape mitigation measures to afford more visual screening for a number of residential dwellings in close proximity to the site.
- 3.1.2. The applicant submitted a response to this further information request to the Planning Authority on 19th September 2023, which included composting toilet details, an updated OCEMP, Hydrology assessment, access track details, construction compound details, updated Landscape and Ecological Mitigation Plan (LEMP), piling rig details, revised haul route, updated passing bay proposal, signed letters, details on cleaning of the panels, a Decommissioning Plan, and an updated Site Layout.

3.2. **Decision**

- 3.2.1. Following receipt of further information, by order dated 13th October 2023 Kilkenny City & County Council (KCCC) issued notification of decision to grant permission for the proposed development subject to 25 no. conditions. The conditions include *inter alia* the following:
 - Condition no.2: Development Contribution of €76,566.75.
 - Condition no.3: Permission to be carried out within 10 years and decommissioned with structures removed not later than 40 years in accordance with an agreed Decommissioning Report.
 - Condition no.5: Archaeological preservation and mitigation.
 - Condition no.7: All identified mitigation measures to be implemented.
 - Condition no.9: Construction hours and noise limits.
 - Condition no.11: Measures in the OCEMP to be implemented.
 - Condition no.13: ECoW to be appointed.
 - Condition 18: Security fencing to be designed to allow movement of mammals.
 - Condition no.21: Bond to be agreed with the planning authority.
 - Condition no.22: Requirement for landscaping to be carried out.
 - Condition no.23: Biodiversity Plan and Habitat Management Plan to be carried out.

3.3. Planning Authority Reports

3.3.1. Planning Reports

3.3.2. There are two Planning Reports on file dated 20th April and 12th October 2023, respectively. The Planning Officer in the initial report stated that the solar farm will deliver continued progress towards a low carbon economy, reduce dependency on fossil fuels and the decarbonisation of the electricity sector, in line with national, regional and local climate change strategies, development plan objectives and renewable energy policies. The report recommended that further information be requested for composting toilet details, an updated OCEMP, Hydrology assessment,

access track details, construction compound details, an addendum to the NIS, updated Landscape and Ecological Mitigation Plan (LEMP), piling rig details, revised haul route, updated passing bay proposal, signed letters, details on cleaning of the panels, a Decommissioning Plan, and an updated Site Layout.

Appropriate Assessment was carried out and further information was sought in relation to run-off, pile driving, silt fencing and culverts. The Appropriate Assessment was completed on receipt of this information and concluded that there is no likely potential for significant effects to any Natura 2000 site.

A second Planner's Report (dated 12th October 2023) refers to the further information submitted, which included and considered that, having regard to the additional information, permission should be granted subject to 25 no. conditions.

3.3.3. Other Technical Reports

Environment Section: The initial report from the AE dated 17th April 2023 sought further information in relation to the onsite toilet, a drainage plan, truck wash out procedures, battery acid leaks, glint and glare receptors, wheel wash facilities, piling of the solar panel frames, analysis of watercourses, culverts, road planings, chemicals or detergents to be used, gases/ liquids in transformers, and details of the measured background noise rather than predicted background noise.

The second report dated 11th October 2023 states that there is no objection to a grant of permission and conditions are recommended.

Roads: The initial report from the SEE dated 17th April 2023 sought further information in relation to the haul route, passing bays, surfacing of the L82121, route survey, and structural integrity of culverts.

The second report from the EE dated 10th October 2023 outlines 3 no. conditions to be attached to a grant of permission.

Fire Services: No objection. Conditions recommended.

3.3.4. Conditions

Condition no.4 requires passing bays as indicated on drawing NEO01077_0341_A Revision A and the applicant to carry out Level 1 and 2 FWD testing, along with a before and after visual and photographic survey on the L4250 local road.

3.4. Prescribed Bodies

Department of Housing, Local Government & Heritage: The initial report from the Development Applications Unit (DAU) sought further information in the form of an Archaeological Impact Assessment. The second submission states that there is no objection to a grant of permission and archaeological mitigation conditions are recommended (per Planner's Report dated 12th October 2023).

Under separate correspondence, no objections to nature conservation aspects of the proposed development. Conditions recommended in relation to the habitat management plan and the timing of hedgerow removal.

3.5. Third Party Observations

The planning authority received a number of submissions on the original application and following receipt of further information. The issues raised in these submissions are generally reflected in the issues raised in the third-party appeal and observations received by the Board.

4.0 **Planning History**

P.A. Ref. No.18573: Permission granted for uprating of 110kv Overhead Line running north-south through the appeal site.

ABP-315383-22: Pre-application consultation for a proposed development of 110kV substation where it was determined that it is a strategic infrastructure development.

5.0 Policy Context

5.1. National Policy

5.1.1. National Planning Framework 2018-2040

National Strategic Outcome 8 seeks to transition Ireland to a low carbon and climate resilient society. Objective 54 seeks to reduce our carbon footprint by integrating climate action into the planning systems. National Policy Objective 55 promotes renewable energy use and generation at appropriate locations within the built and natural environment to meeting national objectives towards achieving a low carbon economy by 2050.

Ireland's national energy policy is focused on three pillars:

- (1) sustainability,
- (2) security of supply, and
- (3) competitiveness.

Ireland must reduce greenhouse gas emissions from the energy sector by at least 80% (compared to 1990 levels) by 2050, while ensuring security of supply of competitive energy sources. The transition to a low carbon energy future requires a shift to predominantly renewable energy.

The NPF states:

'In meeting the challenge of transitioning to low-carbon economy, the location of future national energy generation, for the most part, needs to be accommodated on large tracts of land that are located in a rural setting, while also continuing to protect the integrity of the environment and respecting the needs of people who live in rural areas.'

5.1.2. National Development Plan 2021-2030

The NDP sets out investment priorities underpinning the implementation of the NPF. Chapter 13 deals with NSO 8 Transition to a Climate-Neutral and Climate Resilient Society. Sectoral Strategies – Energy. Public capital investment choices must contribute to a 51% reduction in greenhouse gas emissions by 2030 and lay the pathway to achieve net-zero greenhouse gas emissions by 2050. This will require grid-scale renewable electricity generation and storage.

5.1.3. Climate Action and Low Carbon Development Act 2015 (as amended)

The Act commits Ireland to the objective of becoming a carbon-neutral economy by 2050, reducing emissions by 51% by the end of the decade. Section 17 of the 2021 amendment act amends the principle act such that Section 15(1) requires:

- "(1) A relevant body shall, in so far as practicable, perform its functions in a manner consistent with
 - a) the most recent approved climate action plan,
 - b) the most recent approved national long term climate action strategy,

- c) the most recent approved national adaptation framework and approved sectoral adaptation plans,
- d) the furtherance of the national climate objective, and (e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

"Relevant body" means a prescribed body or a public body.

5.1.4. Climate Action Plan 2024

The Climate Action Plan 2024 (CAP24) is the third annual update to Ireland's Climate Action Plan. The purpose of the Climate Action Plan is to lay out a roadmap of actions which will ultimately lead to meeting our national climate objective of pursuing and achieving, by no later than the end of the year 2050 (as committed to in the Climate Action and Low Carbon Development Act 2015 (as amended), the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. It aligns with the legally binding economy-wide carbon budgets and sectoral emissions ceilings that were agreed by Government in July 2022.

Central to achieving these goals is the strategic increase in the share of renewable electricity to 80% by 2030. To reach 80% of electricity demand from renewable sources by 2030:

- Accelerate the delivery of utility-scale onshore wind, offshore wind, and solar projects through a competitive framework,
- Target 6 GW of onshore wind and up to 5 GW of solar by 2025,
- Target 9 GW of onshore wind, 8 GW of solar, and at least 5 GW of offshore wind by 2030, and
- Deliver a streamlined electricity generation grid connection policy and process, and remove barriers, where possible, for the installation of renewables and flexible technologies reducing the need to build new grid, including hybrid (wind/solar/ storage) connections.

CAP 2024 details the significant changes to enhance the electricity grid's capacity and flexibility. This will accommodate the significant upsurge in renewable energy

while ensuring the system's reliability and efficiency. Additionally, managing electricity demand through innovative policies and technologies is crucial for aligning energy consumption with cleaner production.

5.1.5. National Energy Security Framework (April 2022)

The Framework addresses Ireland's energy security needs in the context of the war in Ukraine. It coordinates energy security work across the electricity, gas and oil sectors. The Framework takes account of the need to decarbonise society and the economy, and of targets set out in the Climate Action Plan to reduce emissions.

Theme 3 - Reducing our Dependency on Imported Fossil Fuels, focusses on three areas of work:

- 7.1 Reducing demand for fossil fuels.
- 7.2 Replacing fossil fuels with renewables, including solar energy.
- 7.3 Diversifying fossil fuel supplies.

Under 7.2, the statement notes that prioritising renewables is in line with the requirements of the recast Renewable Energy Directive and the EC REPowerEU action statement. The Commission has called on Member States to ensure that renewable energy generation projects are considered to be in the overriding public interest, and the interest of public safety, and the Government supports this request.

Responses include no. 25: Align all elements of the planning system to fully support accelerated renewable energy development.

5.1.6. National Energy & Climate Action Plan 2021-2030

Under the dimension Decarbonisation - Renewable energy, key objectives include:

- Achieve a 34% share of renewable energy in energy consumption by 2030.
- Increase electricity generated from renewable sources to 70%.
- Up to 1.5 GW of grid scale solar energy.

Policies and measures include increased renewable electricity generated to 70%. Under dimension 3, Energy Security, the key objective is maintaining security of our energy system in the most cost-effective manner. This includes efforts to increase indigenous renewable sources in the energy mix (wind, solar and bioenergy).

5.1.7. **Food Vision 2030**

Food Vision 2030 is a strategy produced by the Department of Agriculture, Food and Marine in August 2021. It sets out the 2030 vision for Ireland's Agri-Food sector which aims for Ireland to become a world leader in Sustainable Food Systems (SFS). The strategy notes that facing into the decade to 2030 the agri-food sector can make significant and urgent improvements in its environmental footprint. To realise this vision the strategy has adopted four high level missions for the sector to work towards in the period to 2030.

Mission 1 of the strategy is to create "a climate smart, environmentally sustainable Agri-food sector". To achieve this mission seven goals have been created, the first of these is to "develop a climate neutral Agri-food system by 2050". The ten actions identified to achieve this goal includes Action 7 which states the sector must "scale up renewable energy (RE) sources especially anaerobic digestion, biorefining and biomass supply, and solar PV, focus on energy efficiency and examine potential barriers to the roll-out of RE at farm level, including necessary support for microgeneration and access to the grid."

5.2. Regional and Local Policy

5.2.1. The Regional Spatial and Economic Strategy for the Southern Region

RPO 95 - it is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation.

RPO 96 - support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure to integrate renewable energy sources and ensure our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows.

RPO 100 - support the integration of indigenous renewable energy production and grid injection.

RPO 219 - it is an objective to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers (subject to appropriate

environmental assessment and the planning process) to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.

RPO 221 - Local Authority City and County Development Plans shall support the sustainable development of renewable energy generation and demand centres such as data centres which can be serviced with a renewable energy source (subject to appropriate environmental assessment and the planning process) to spatially suitable locations to ensure efficient use of the existing transmission network.

5.2.2. Kilkenny City & County Development Plan 2021-2027

Chapter 2 Climate Change

Strategic Aim: To provide a policy framework with objectives and actions in this City and County Development Plan to facilitate the transition to a low carbon and climate resilient County with an emphasis on reduction in energy demand and greenhouse gas emissions, through a combination of effective mitigation and adaptation responses to climate change.

Chapter 7 Rural Development

Diversification: It is an objective of the Council to enhance the competitiveness of rural areas by supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including ICT based industries and those addressing climate change and sustainability in line the NPF.

Chapter 11 Renewable Energy

Strategic Aim: To generate 100% of electricity demand for the County through renewables by 2030 by promoting and facilitating all forms of renewable energies and energy efficiency improvements in a sustainable manner as a response to climate change in suitable locations having due regard to natural and built heritage, biodiversity and residential amenities.

Objective 11A: To support and facilitate the provision of energy in accordance with Ireland's transition to a low carbon energy future by means of the maintenance and upgrading of electricity and gas network grid infrastructure and by integrating

renewable energy sources and ensuring our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows over the period of the plan.

Section 11.6 Solar Energy

11.6.3 Photovoltaic Solar Electricity

Due to high levels of irradiance, according to SolarGIS, County Kilkenny has the potential to generate between 950 to 1000kWh/m2, which, together with Counties Wexford and Waterford, makes Kilkenny a very attractive location for utility scale solar farms. Standalone polar PV needs to be stored and for this purpose storage batteries are generally used in domestic and commercial scale solar installations to store the energy to match the domestic or network demand.

11.6.5 Solar Energy Development Management Guidance

All solar farm applications will be assessed on a site-specific basis and in accordance with the principles of proper planning and sustainable development. The best locations for Utility Scale Solar PV (USSPV) are:

- Proximate to a 38ky or 110ky lines and substations.
- Rural Brownfield (e.g. cutaway bog).
- Urban Brownfield (e.g. former landfill sites).
- Topographically assimilative and screening rich landscapes.
- Agricultural Lands.

11.6.5.1 Utility Scale Solar PV (USSPV)

It is recommended that the impact of Utility Scale Solar PV (USSPV) on the landscape be considered with due cognisance of the following:

Individual and cumulative 'zones of visual influence' identifying where the
solar arrays will be visible from. Sequential effects on visibility need to be
considered where an observer moves through a landscape and sees two or
more schemes. Common routes through a landscape (e.g. major roads; long
distance paths or cycle routes) can be identified as 'journey scenarios' and
the proposals impact on them can be assessed;

- In addition to the proposal under consideration, consider photomontages to show all existing and consented solar farms, including those for which planning applications have been submitted,
- If necessary to undertake a glint and glare assessment, including cumulative
 effectives of all existing and consented solar farms. Glint and Glare is linked
 to the characteristics of some solar energy technologies such as older solar
 PV panels or concentrated solar power (CSP) where energy is focussed on a
 central boiler which drives a steam turbine. Glint and glare are defined as:

"Glint" gives out or reflects small flashes of light.

"Glare" shine with a strong or dazzling light.

- At the most detailed level, description and assessment of cumulative impacts may include the following landscape issues:
 - scale of development in relation to landscape character or designations,
 - sense of distance,
 - o existing focal points in the landscape, and
 - o sense of remoteness or wildness.
- Proximity of areas of archaeological potential. Any application for a USSPV scheme should at least submit an archaeological assessment predicated on a site walk over and desk research of possible archaeological potential.
- Proximity to sensitive visual receptors, such as those found in heritage landscapes or areas with scenic landscape qualities, including protected views.

A decommissioning statement should be included as a standard component of a planning application for utility scale solar PV. The Council will require a commitment to decommissioning at application stage. A condition to agree decommissioning details will be a consideration during the decision-making process.

5.3. Guidelines

5.3.1. No national guidelines have been issued to date. The following are of relevance:

Planning and Development Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland (October 2016 report prepared by Future Analytics for the Sustainable Energy Authority Ireland/ SEAI).

Planning guidance for the development of large-scale ground mounted solar PV systems (British Research Establishment/ BRE – 2016).

5.4. Natural Heritage Designations

5.4.1. The appeal site is not located within any designated European sites. The closest Natura 2000 sites are the River Nore SPA (site code: 004233), the River Barrow and River Nore SAC (site code: 002162), and Thomastown Quarry SAC (Site Code: 002252), which are located approximately 4.2km to the southwest and south, respectively. Blackstairs Mountain SAC (Site Code: 000770) is located approximately 14km to the southeast of the subject site.

5.5. **EIA Screening**

- 5.5.1. 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). In this regard, a requirement for preliminary examination or EIA would not arise.
- 5.5.2. The proposed solar energy development will require a connection to the national grid. While this appeal relates to a decision under S.34 of the Act, an application for such grid connection would fall under the Strategic Instructure provisions of the act requiring a separate application under S.182. Such underground grid connection would not constitute a class of development under Schedule 5 and would not require preliminary examination or EIA.
- 5.5.3. Under Part 2 of Schedule 5 Class 10: Infrastructure projects (dd) "all private roads which would exceed 2000 metres in length". On my initial review of the appeal, I considered that the applicant proposed to construct approximately 5.3km of permanent private road to provide internal access on the subject site to the proposed solar arrays and other associated structures. There were two types of access roads proposed and referred to as access roads by the applicant on the site layout plan, stated as 4.5m and 3.5m in width, respectively. The composition of both roads on the

- cross-sections provided by the applicant was 200mm of compacted hardcore stone, geogrid layers and a surface of 75mm stone/ tarmac.
- 5.5.4. Given the nature of the access roads proposed, I considered that this part of the proposed development constituted a private road and would be in excess of the threshold detailed in Class 10(dd) of Schedule 5, Part 2. On this basis, I considered that the proposed development would require the submission of an EIAR. On the 31st of July 2024, the First Party was notified of this requirement.
- 5.5.5. In their response to this, the applicant set out the case that an EIAR was not required and asked that the Board withdraw its request for an EIAR. The applicant clarified that the reference to access roads on the site layout plan was incorrect and that the proposed tracks are to be finished in stone or crushed stone. The applicant has submitted a cross-section (drawing no. IRL_EPD_ATS) of the proposed access track in lieu of the original cross-sections (drawing no.'s EPF_RCS 3500 and EPF_RCS 4500) for clarity. The applicant has also submitted photographs demonstrating both these types of proposed finishes.
- 5.5.6. I am satisfied that the applicant has clarified the type of track proposed. Further to this, I do note that the access tracks are referred to as 'tracks' in the public newspaper and site notices.
- 5.5.7. On this basis, I am satisfied that the proposed development does not include such private roads and therefore does not fall under Class 10. A requirement for fire access roads has been considered above, however, notwithstanding any such requirement I note that the Board has previously determined that such access tracks in respect of solar developments do not fall to be considered under Class 10 (ABP-301028-18, ABP-302681-18, PL17.248146).
- 5.5.8. Rural restructuring of farmland requiring screening under the Environmental Impact Assessment (Agriculture) Regulations, 2011, by the Department of Agriculture, Food and the Marine. In this regard I note the more recent amending regulation S.I. 383 of 2023 Planning and Development (Amendment) (No. 2) Regulations 2023, which amends Class 1 of Part 2 of Schedule 5, by inserting the following:
 - (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.

5.5.9. I note that these thresholds reflect those set out in Schedule 1, Part B of the 2011 EIA (Agriculture) Regulations. Furthermore, Part A of Schedule 1 of the 2011 regulations sets out the following thresholds for screening for EIA:

Restructuring of rural land holdings	Screening Required
Length of field boundary to be removed	Above 500m
Re-contouring (within farm-holding)	Above 2 hectares
Area of lands to be restructured by	Above 5 hectares
removal of field boundaries	

- 5.5.10. These screening thresholds may be a useful guide in considering the reinserted Class 1(a) above. The Environmental Impact Assessment (Agriculture) Regulations Guide for Farmers describes restructuring of rural land holdings as involving changing the layout of the farm. I note that the 2023 amending regulations do not identify solar development as a class of development to be subject to EIA / EIA Screening.
- 5.5.11. Circular EUIPR 01/2023 notes that it is the elements of field boundary removal or recontouring of a field which amount to restructuring of a rural land holding which would need to be screened for EIA. The proposed development involves the removal of a limited extent of hedgerow, primarily at the proposed entrances to the development site, comprising a total of 1,039m. This is significantly below the threshold of 4km for EIA reinserted by the 2023 amending regulations and is also considerably below the screening threshold set out in the 2011 (Agricultural) regulations. Such removal is associated with access requirements and does not result in the amalgamation or enlargement of existing fields or change in the layout of the lands. I have concluded above that significant effects on biodiversity are not likely as a result of such works.
- 5.5.12. Having regard to the purpose and to the nature and extent of the works in the subject case, I would conclude that such non-agricultural development, would not constitute

- rural restructuring and, therefore, would not be considered sub-threshold development requiring preliminary screening or EIA.
- 5.5.13. The application is accompanied by an EIA Screening Report, and the application provides Schedule 7A information. I refer to Form no.3 appended to this report where the screening determination for EIA is carried out and it is determined that EIA is not required.

6.0 The Appeal

6.1. Grounds of Appeal

- 6.1.1. The grounds of appeal are submitted by Brendan Buck, Planning Consultant on behalf of Susan Mosse & others. The main points made can be summarised as follows:
 - Contends that the application to KCCC was invalid due to, inter alia, inadequate EIA screening, inadequate AA, public notices, failure to advertise substantial further information, landowner consent, project splitting, length of permission, duration of development, lack of assessment on agricultural land, and the WFD was not addressed.
 - Requests An Bord Pleanála to note the omission of Hugginstown Fen SAC from the project ecologist's and KCCC's assessment.
 - Contends that the proposed development is not acceptable in principle on land with a land use zoning of 'Agriculture' in the CDP and that it represents a material contravention of the Plan.
 - Contends that the proposed development is contrary to national, regional and local planning policies and highlights an objection to the lack of national policy for Solar PV development.
 - Contends that the proposal is premature pending the adoption of guidelines for such developments and raises a concern about the use of important agricultural land for solar developments.
 - Concerned about the scale of the development and its impact on neighbouring homes and farms.

- Contends that the roads and traffic proposals are unacceptable and, in particular, the southern entrance.
- Outlines concerns about the visual impact of the proposed development on the landscape and how this impact was assessed by KCCC.
- Outlines concerns about the impact on ecology and the inadequacy of the NIS, including effects on the Freshwater Pearl Mussel (reference to CJEU C-258/11 Sweetman) and Thomastown Quarry SAC.
- Contends that the FRA is based on an incomplete drainage scheme.
- Contends that the impacts from glint and glare are not adequately addressed.
- Concerns about the impact of noise, particularly during the construction phase.
- Contends that the proposed development will result in the depreciation of property in the vicinity.
- Concerned about the impact on Kilfane Glen & Waterfall tourist destination, on the landscape character of 'Brandon Hill Transition Zone', and protected views.
- Highlights that archaeological concerns are addressed by means of a condition rather than by survey.
- Concerned about the risk of fire.
- Concerns outlined in relation to decommissioning.
- Does not support the grant of a 10 year permission.
- Outlines a number of concerns regarding the construction of the proposed development i.e., phasing, complaints process, noise, light spill and dust.

6.2. Applicant Response

- 6.2.1. The main issues raised in the First Party response to the grounds of appeal can be summarised as follows:
 - Outlines why the proposed development does not require an EIAR to be submitted.

- States that there is no hydrological, ecological or ornithological link to Hugginstown Fen SAC from the subject site.
- Highlights the appellants lack of understanding of the term 'project splitting' outlined in the HC case: O'Grianna & others v An Bord Pleanála (2015).
- Confirms that the planning application was valid in terms of public notices, documentation submitted, responses from statutory consultees, letters of consent, advertisement of further information, assessment of impact on agricultural land, Water Framework Directive, and duration of both the planning permission and the lifespan of the proposed development.
- States that the KCCDP advocates the use of agricultural land for Solar PV development.
- States that only 6.04% of the overall site will be lost to agricultural use over the lifetime of the proposed development.
- States that as the project is not EIA development it is not necessary to provide alternative site assessments.
- Explains how the application site was formulated.
- Contends that the proposed development will have limited visual impact and, therefore, will not adversely affect tourism assets in the area.
- Outlines national, regional and local policy support for the proposed development.
- States that the land is not prime agricultural land, but upland grazing land and suitable for sheep.
- Contend that the proposed development is not out of character or scale with the receiving environment.
- Confirms that sightlines will be available at the southern entrance without interfering with 3rd party properties.
- States that the northern access points are for operational and maintenance access only with intermittent use by light goods vehicles.

- Confirms that the northern access is no longer proposed to be used as a haul route and that the proposed local road L4025 is suitable for a haul route as it is presently being used by agricultural vehicles and HGVs.
- Confirms that all passing bays are within the council-controlled roadway verge and that drawings of these proposals are accurate.
- States that all CCTV cameras are for security purposes only and will be inward facing.
- States that there will be a net increase in hedgerows on completion of the compensatory and mitigation planting.
- States that vernacular field boundaries and hedgerows will be re-established.
- Advises that views of the site beyond 5km are outside the zone of theoretical visibility and, therefore, were not considered.
- Comments on a number of the photos submitted by the appellants,
 highlighting the nature of the photos taken.
- States that the solar panels have a physical life of between 20 40 years.
- Confirm that panel cleaning will take place once a year and will not cause contamination to watercourses.
- States that there are no known occurrences of leakage from battery storage projects in the UK to date.
- States that no pollution will occur from transformers or cabling nor will overheating occur.
- Highlights mitigation in the form of a 5m setback form the Sugarstown stream,
 SuDS and silt traps.
- Confirms that no trees with bat roost potential are to be removed as part of the proposed development.
- States that it is not possible to assess the cumulative impact of a pending application for a wind farm nearby.
- Confirms that the surface run-off rate from the proposed development will not exceed the current greenfield run-off rates.

- States that the site is located in Flood Zone C and no impact is anticipated to or from the proposed development in relation to flooding.
- Pollution prevention measures are outlined in the OCEMP that will ensure watercourses are protected.
- States that the Glint & Glare assessment has been carried out in accordance with current best practice.
- Confirms that a construction phase noise assessment was submitted as part of the FI response to KCCC.
- States that landowner properties are predicted to receive the highest noise levels from the proposed development and that enhanced planting is proposed along the site boundary with landowners off the cul-de-sac (northern boundary) as part of the FI response to KCCC.
- Confirms that a noise contour map was submitted with the NIA.
- Outlines that both construction noise and operational noise will be within acceptable limits.
- States that there is no credible evidence available to suggest that the proposed development will have a negative impact on property values.
- Confirms that all archaeological requirements will be complied with.
- Outlines the decommissioning process and requests, if permission is granted, that a bond to be agreed with KCCC be required by means of a planning condition.
- Fire safety regulations will be adhered to under relevant legislation.
- Highlights that the principle of 10 year permissions has already been accepted by the Board.
- States that the actual construction phase for the proposed development would be approx. 12 months.
- A final CEMP will be submitted to and agreed with KCCC prior to commencement of development.

 Confirms that details of the construction and project manager will be circulated locally pre-construction.

6.3. Planning Authority Response

- 6.3.1. The main issues raised in the Planning Authority's response to the grounds of appeal can be summarised as follows:
 - States that the site is located in a rural un-zoned area and not on agricultural zoned lands.
 - States that sections 7.7 and 11.6 of the KCCDP relate to rural diversification and solar energy and that the proposal is not a material contravention of the plan.
 - Given the amount of land devoted to agricultural use in Co. Kilkenny, considers the proposal would allow for the transition to a low carbon economy and the diversification would contribute to this rural area's vitality and viability.
 - Confirms that the Roads Design Engineer is broadly satisfied with the recommended roads conditions but, for clarity, proposes some amendments to those conditions.
 - Considers that the gaps identified in the NIS by KCCC have all been adequately addressed or conditioned.
 - Confirms that there are no recorded sites within the RMP, RPS or NIAH on the application site and that, as standard, the DAU have recommended that an AIA be carried out as a condition of planning.
 - States that there is no evidence that solar farms significantly depreciate the value of residential homes.
 - Notes that hedgerow removal as part of the development will be compensated for within the landscaping/ ecology plan.
 - Confirms that no part of the site is located within any designated visually sensitive, protected view or high amenity value area in the KCCDP.
 - Does not consider the refusal reference PL10.246875 to be relevant to this application.

 Highlights the role that the delivery of 64MW of renewable energy will play in achieving the country's target of 80% renewable energy by 2030.

6.4. Observations

6.4.1. There are 28 observers noted in relation to the subject appeal, including and summarised as follows:

1. Ciara Bergin

- Concerned about the destruction of valuable habitats.
- Considers the proposed development to be contrary to the existing pattern
 of development in the area and contrary to planning policy.
- Contends that landscape, visual impact, and glint and glare have not been properly addressed.
- Concerned about impact during construction regarding noise and management.
- Concerned about impact on water quality.

2. Martina Brennan

- Concerned about the health and safety risk posed by construction traffic.
- Concerned about impact on water quality.
- Contends that solar energy production is not carbon neutral.
- Concerned about impact on wildlife habitats.

3. Margaret Coughlan

- Concerned about traffic delays during construction.
- Concerned about pollution during construction.
- Contends that the proposed development will have a negative impact on the visual amenity of the area.

4. Joe Hoban

- Concerned about danger to water quality.
- Concerned about noise impact during construction.
- Concerned about impact from glint and glare.

5. Valerie Brennan

- Concerned about the impact of construction noise on family health.
- Concerned about traffic delays during construction.
- Contends that their house will be devalued.
- Mention project splitting as illegal.
- Support the appeal document submitted by BPS.

6. Sandra McCarthy

- Contends that the proposed development will have a negative effect on the land and its resources.
- Concerned about the removal of farmland from food production.
- Concerned about traffic impact during construction.
- States that the proposed site is in an uphill area that will be highly visible.

7. Clyde Meyler

- Concerned about traffic impact during construction.
- Concerned about visual impact on D1-Brandon Hill Transition Zone.
- Contends that the proposed development is a material contravention of the agricultural zoning.

8. Christopher O'Reilly

Per 3 above.

9. Sarah Houlihan

- Concerned about the health and safety risk posed by construction traffic.
- Contends that the proposed development will have a negative impact on the visual amenity of the area.

10. Adrian & Susan Lanigan

- Contends that the proposed development will have a negative impact on the visual amenity of the area.
- Concerned about the removal of farmland from food production.
- Concerned about the health and safety risk posed by construction traffic.

 Contend that the impacts from the proposed development have not been properly assessed.

11. Michael Wright

- Contends that there are huge gaps in complying with biodiversity and habitats regulations.
- Contends that the proposals contravene policies in the CDP.
- States that construction during the breeding season is illegal.
- Requests that ABP carefully consider their responsibility in relation to endangered species (list provided).

12. Kathleen Doherty

- Concerned about the health and safety risk posed by construction traffic.
- Contends that KCCC has permitted works that may impact third party private lands.
- Concerned about danger to water quality.
- Highlights outstanding issues that need to be addressed by the applicant in the KCCC request for further information.
- Contends that cumulative impact not properly assessed.

13. Michael Bergin

- Concerned about the loss of habitat of significant ecological value.
- Concerned about noise impact during construction.
- Concerned about pollution and cumulative impacts.

14. Pat O'Keeffe

- Concerned about danger to water quality.
- Concerned about noise impact during construction.
- Concerned about impact of glint and glare on his house (receptor 46).

15. Paul & Su Brown

- Queries the practicalities of using solar energy as a reliable and dependable source of energy in Ireland.
- Concerned about impact on their mental and physical health.

Contend that their house will be devalued.

16. Joan & Joe Bolger

- Contends that KCCC was ill-equipped legislatively to properly assess the cumulative impacts of the proposed industrial scale developments in the area.
- Highlights designated location within Brandon Hill Transition Zone (D1).
- Concerned about decommissioning and disposal of solar panels.
- Wants planning decision to be deferred until strategic environmental assessments have been carried out.

17. Joan & Bob Cahill

- Agree with the appeal submitted by BPS.
- Concerned about danger to water quality and any impact on their business.
- Concerned about aspects of the NIS as possible significant impacts are not clear.
- Seeks clarity on quantity and make of solar panels.
- States that there is no mention of the proposed RWE wind farm adjacent to the proposed development.
- Concerned about the removal of farmland from food production.
- Contend that renewable energy should be provided by offshore wind farms.

18. Liam Aylward

- Contends that inadequate traffic management and passing bay provisions were accepted by KCCC.
- States that drainage works have recently been completed by KCCC on the Kilfane Road and the proposed development will adversely impact these works.

19. Don Doherty

Concerned about the health and safety risk posed by construction traffic.

- Concerned about danger to water quality and that the Water Framework Directive is not addressed.
- Highlights that the further information provided by the applicant to KCCC was inadequate.
- Concerned about noise pollution.
- Concerned about cumulative impacts.

20. Rowan Brennan & Ciara Stapleton

- Contend that the proposed development will have a negative impact on their residential amenity (receptor no.9).
- Contend that their house will be devalued.
- Concerned about danger to water quality.
- Concerned about noise pollution.

21. Eamonn Holohan

 Concurs with concerns raised in Sections 2.7 and 2.8 of BPS appeal and considers a separate application for a grid connection to be deceiving the public.

22. Kristof Hoek

- Supports the appeal report submitted by BPS.
- Contends that the proposed development will detract from the beauty and history of the area.
- Concerned about impact of glint and glare.
- Contends that his house will be devalued.
- Contends that the road infrastructure is inadequate.
- Considers the proposal to be project splitting.
- Concerned about danger to water quality.
- Highlights ABP's tendency to grant permission by referencing renewable targets, which change year on year.
- Highlights the amount of energy used by data centres.
- Quotes industry guidelines as being biased towards solar development.

Concerns outlined in relation to decommissioning.

23. Willem Hoek

- Supports the appeal report submitted by BPS.
- Contends that the proposed development will detract from the upland countryside of the area.
- Considers the proposal to be developer led and not planning led.
- Considers Ireland not to be a suitable location for solar energy generation.
- Considers the proposal to be project splitting.

24. Jimmy Collier

- Contends that the road infrastructure is inadequate.
- Concerned about noise.
- Concerned about damage to flora and fauna.
- Concerned about danger to water quality.
- Concerned about impact of glint and glare.
- Contends that his house will be devalued.

25. Eoin Prendergast

- Concerned about danger to water quality and that the Water Framework Directive is not addressed.
- Draws attention to gaps in the NIS noted by KCCC.

26. Kilian Prendergast

Per 25 above.

27. Hugh Prendergast

Per 25 above.

28. Christy Nolan

- Contends that the proposed development will ruin the landscape.
- Concerned about traffic impact during construction.
- Concerned about impact on groundwater.

6.5. Further Responses

- 6.5.1. On 31st July 2024, the First Party was advised by the Board that an Environmental Impact Assessment Report was required to be submitted because it was considered that the proposed private roads within the development would be in excess of the threshold detailed in Class 10 (dd) of Schedule 5, Part 2 of the Regulations.
- 6.5.2. As outlined in Section 5.5 of this report above, the applicant set out the case that an EIAR was not required and asked that the Board withdraw its request for an EIAR. I was satisfied that the applicant clarified the type of track proposed and noted that the access tracks were referred to as 'tracks' in the public newspaper and site notices. On this basis, I was satisfied that the proposed development did not include such private roads and therefore did not fall under Class 10. Therefore, an EIAR is not required.
- 6.5.3. This information was circulated to the Third Parties. A response was received from the appellant, the planning authority and 16 no. other responses from observers. The appellant reaffirms their view that an EIAR is required. The planning authority had no further comment to make. A number of the observers express the view that an EIAR is required and most reiterate issues raised in their original submissions.

7.0 Assessment

Having examined the application details and all other documentation on file, including all of the further responses to the appeal, having inspected the site, and having regard to relevant local, regional and national policy and guidance, I consider, notwithstanding the variety of issues and objections raised, that the main planning issues to be considered are under the following headings:

- Principle of Development
- Loss of Agricultural Land
- Landscape and Visual Impacts
- Glint and Glare
- Soil and Water
- Roads and Traffic

- Flooding
- Residential Amenity
- Biodiversity
- Archaeology
- Other Issues

7.1. Principle of Development

- 7.1.1. Renewable energy development is supported in principle at national, regional and local policy levels, with collective support across government sectors for a move to a low carbon future and an acknowledgement of the need to encourage the use of renewable resources to reduce greenhouse gas emissions and to meet renewable energy targets set at a European level. It is also an action of the NPF under National Policy Objective no. 55 to 'promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050'.
- 7.1.2. The Kilkenny City County Development Plan 2021-2027 (KCCDP) is supportive of renewable energy in general, including solar power, and it is their stated strategic aim to generate 100% of electricity demand for the County through renewables by 2030. Objective 11A states that KCCC will support and facilitate the provision of energy in accordance with Ireland's transition to a low carbon energy future by means of the maintenance and upgrading of electricity and gas network grid infrastructure.
- 7.1.3. Similarly, and specifically for solar energy, it is noted in the KCCDP that County Kilkenny has the potential to generate between 950 to 1000kWh/m², which makes it a very attractive location for utility scale solar farms. It further notes that standalone polar PV needs to be stored and, for this purpose, storage batteries are generally used in commercial scale solar installations to store the energy to match the domestic or network demand.
- 7.1.4. I note the contention of the Appellant and a number of the observers that the proposed development is a material contravention of the KCCDP as it constitutes

industrial development on lands with a land use zoning of 'Agriculture'. In their response to the appeal, KCCC state that the site is located in a rural un-zoned area and not on agricultural zoned lands. On the day of my site inspection, I noted that all of the appeal site is in agricultural use and, having reviewed the KCCDP, I am satisfied that the lands that are the subject of this application are un-zoned. I consider the proposed development to be in accordance with KCCC's strategic aim to generate 100% of electricity demand for the County through renewables by 2030 and Objective 11A to support and facilitate the provision of energy in accordance with Ireland's transition to a low carbon energy future. Therefore, I am satisfied that there is no material contravention of the KCCDP.

7.1.5. The proposed development is therefore supported by national, regional, and local policies in terms of renewable energy. Accordingly, I consider the proposal to be acceptable in principle and that it would contribute to the diversity of sources of energy supply and hence the security of energy supply. The acceptability of the proposal is contingent on other issues addressed below.

7.2. Loss of Agricultural Land

- 7.2.1. The subject lands are in agricultural (mainly grassland) use. The policies within the Development Plan do not identify a preference for the reuse of previously developed land such as brownfield land, contaminated land or industrial land and non-productive agricultural land, in preference to productive land. Section 7.7 of the KCCDP relates to rural diversification and states that it is an objective of the Council to enhance the competitiveness of rural areas by supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including those addressing climate change. Therefore, the siting of solar energy development on any type of agricultural land is not excluded.
- 7.2.2. The Appellants are concerned that the pre-dominant use of land in the area is changing from food production to electricity production and this is resulting in the consequent loss of high-value agricultural land. In response to this, the First Party states that the KCCDP advocates the use of agricultural land for Solar PV development and that only 6.04% of the overall site will be lost to agricultural use

over the lifetime of the proposed development. The First Party raises the idea and possibility of multiple uses of space/ land through the integration of agriculture and solar uses. In their response to the appeal, KCCC state that, given the amount of land devoted to agricultural use in Co. Kilkenny, it considers that the proposal would allow for the transition to a low carbon economy and the diversification would contribute to this rural area's vitality and viability.

- 7.2.3. I note that there is no national land use policy in Ireland which prescribes the preservation or protection of agricultural lands and to which this development would be contrary, nor is there any national guidance specifically in relation to the location of solar energy development. Furthermore, the Climate Action Plan 2024 notes the challenges facing the country to meet its climate and emissions targets and identifies such renewable energy projects as being in the overriding public interest. The plan notes that an ambitious target of up to 5GW of solar by 2025 will require a transformation from agricultural land use to other uses such as solar PV. This would not suggest that development of the nature proposed on agricultural lands is unacceptable in principle.
- 7.2.4. I acknowledge that operational use for grazing would be low intensity relative to existing agricultural uses and that such grazing use is commonplace and a viable use in these types of developments. Notwithstanding its spatial extent, the development works themselves are relatively non-intrusive and are generally reversible, such that the lands could be returned to agricultural use. Having regard to the foregoing, I do not consider that the proposed development would be unacceptable solely on grounds of the loss of productive agricultural lands.

7.3. Landscape & Visual Impacts

7.3.1. I refer to the Planning Statement and the associated Landscape & Visual Impact Appraisal (LVIA) with photomontages submitted with the planning application together with the response to the appeal. The Landscape Character Assessment (LCA)¹ in the Development Plan characterises the appeal site as 'The Brandon Hill

¹ The Board should note that the Landscape Character Assessment is contained in Appendix C of the Kilkenny County Development Plan 2008-2014 and this assessment has now been retained as part of the Kilkenny City & County Development Plan 2021-2027.

Transition Area'. This transition area is not perceived to hold any special or sensitive landscape areas.² It has capacity to absorb most types of development subject to the implementation of appropriate mitigation measures. In principle therefore, the proposed development is acceptable under the development plan landscape policy subject to local sensitivities.

- 7.3.2. The proposed development site is extensive, comprising c.103.64 ha., and varying in character. The subdivision of the development lands into a number of separate parcels/ fields reduces the apparent scale of development, such that the overall development would not be viewed from any one location in its entirety. The development will generally retain existing features, including hedgerows and mature treeline features, which will contribute to screening the development.
- 7.3.3. The sloping nature of the lands provides some exposure to the west and south and, consequently, the proposed development will be more prominent in local views along the L4205 local road, the R448 (distant) and R703 regional roads. Such localised impacts arising are limited, however, and not considered to have significant negative effects on the amenity of the area. The First Party proposes to remove, and reinstate, c.34.5m of roadside boundary along the L4205 local road in order to provide appropriate sightlines at the southern/ main entrance. Such existing boundary vegetation is not of high quality, however, and subject to the proposed reinstatement planting it is considered that the short to medium-term effects of the development would be acceptable.
- 7.3.4. The LVIA methodology outlined in Appendix C examined the effects of the development on the general visual amenity through the selection and assessment of representative viewpoints. The solar farm is well screened with the LVIA concluding that "the potential visual effects of the Proposed Development upon these assessed viewpoint receptors range from Moderate to Moderate / Minor adverse to No Change, with some of these slightly reducing as the mitigation planting becomes established by Years 5-10."
- 7.3.5. On the day of my site inspection, I observed that parts of the main body (Field 44 and 45) of the proposed development site were visible intermittently along the R703 i.e., from VP1. The residual impact from these views is demonstrated on the

² P.67, Landscape Character Assessment, Kilkenny County Development Plan 2008-2014.

submitted photomontage and can be classed as being in the range of imperceptible to slight in Year 5. Similarly, VP6 and VP7 from the R448 to the west of the subject site will have an imperceptible residual impact due to distance and established boundaries. Furthermore, native hedgerows are to be planted along the northern boundary of Field 7, 8, 23 and 24 and the western and southern boundaries of Field 10 of the Proposed Development and maintained to a height of at least 3m. This will mitigate any visual impact experienced on the local road to the north of the subject site.

- 7.3.6. I accept that the proposed development will be a novel intervention in the landscape and there are potential for landscape or visual impact impacts. However, it is considered the solar farm will not become a prominent feature on the skyline and will be visually contained between existing field boundaries. It is reasonably setback from public roadways and screened with existing treelines and hedgerows as well as supplemental planting such planting will provide screening which may not have been available previously. The landscape is not designated as sensitive in the area of the solar farm, and, therefore, it is considered the landscape at this location has the capacity to absorb the proposed development in the context of the wider rural area which is already intensively used for agriculture.
- 7.3.7. Solar farms are likely to become increasingly read as part of the rural environment and diverse agricultural sector, which is well supported by policy. It is also noted that the solar farm is in effect temporary, and the lands could revert to current farming practices in future, if desired. Overall, it is considered the visibility of the proposed development is unlikely to draw attention to itself and even if noticed, is unlikely to detract from the visual character of the area or tourist amenities such as Kilfane Glen and Waterfall. I consider the scale of the proposed development is proportionate to the landscape character and designations.
- 7.3.8. There is no other significant development in the area of the solar farm that would give rise to a cumulative visual effect. Any sequential effects (where an observer moves through a landscape) can be successfully mitigated. This is the only solar scheme in the area, and there is no potential to see two or more schemes. There are no major roads; long distance paths or cycle routes that will be affected by the proposed development. There are no focal points or sense of remoteness/ wildness to the site and landscape character at this location. The planned grid infrastructure

- has been factored into the assessment and will not give rise to any significant landscape and visual impact either.
- 7.3.9. The proposed development will result in a change to the character of the area however, I do not regard the effects of such change as significantly negative or consider that it would be unacceptable in principle at this location. While it is an attractive, mature rural landscape, this area is not designated as a scenic landscape in the County Development Plan or for tourism related development. This is a landscape designated as a 'transition area' which I consider can accommodate the proposed solar energy development as a compatible use, and this change must be seen in the context of the energy and climate issues facing the country.

7.4. Glint & Glare

- 7.4.1. The Glint & Glare Assessment (G&GA) confirms that there will not be any significant reflectance effects on residential and road receptors within 1km of the proposed development and that cumulative impacts are not anticipated.
 - Residential Receptors The G&GA concluded that out of the 67 residential receptors assessed 17 residential receptors were dismissed as they are located within the no reflection zones. Consequently, geometric analysis was conducted for 50 individual residential receptors. This analysis indicates no possible impact at 24 no. of the receptors. Native hedgerows are to be planted along the northern boundary of Field 7, 8, 23 and 24 and the western and southern boundaries of Field 10 of the Proposed Development and maintained to a height of at least 3m. This will screen views from receptors 11 and 12 and reduce the impact to None at these dwellings. Post-mitigation, only 9 no. dwellings (receptors 21, 22, 23, 24 (x3) and 25 (x3))³ show the potential for residual impacts. Such effects would be of low magnitude and have no significant effect.
 - Road Receptors 48 road points were assessed along the surrounding road network. 12 road receptors were dismissed as they are located within the no reflection zones. Geometric analysis was then conducted for 36 road receptors, and it was concluded that solar reflections are possible at 23 of these (12 high

³ Table 7-10, Technical Appendix 7: Glint and Glare Assessment (Neo Environmental Limited, January 2023)

- impact; 11 low impact). Following mitigation, all receptors will have views of the Proposed Development blocked by intervening vegetation, topography or buildings and therefore their impact will be reduced to None.
- 7.4.2. The Appellant, and some of the Observers, contend that the impacts from glint and glare are not adequately addressed. In their response, the First Party states that the Glint & Glare assessment has been carried out in accordance with current best practice. I consider that the effects of glint and glare and their impact on local receptors has been analysed in detail and there is predicted to be only Low and None impacts once mitigation measures are applied. I agree with the assessment that glint and glare effects on road users as a result of the proposed development is unlikely to be significant.
- 7.4.3. I am satisfied that there are no obvious inconsistencies in relation to landscape mitigation in the proposed application with regard to the screening of glint and glare effects from surrounding receptors as the vast majority of this is provided by existing vegetation. The proposed mitigation will ensure that there will be no significant effects of glint and glare for residential and road receptors.

7.5. Soil and Water

- 7.5.1. It is proposed to plant and maintain a grassy field cover beneath the panels and in between the rows of panels of the proposed solar farm development. Sizeable separation distances have been incorporated between the solar array panels to avoid blanket coverage of the site. The proposed solar farm development does not include any gravel or paved sections beneath the panels.
- 7.5.2. With regard to the construction phase, the Outline Construction and Environmental Management Plan (OCEMP) states that the subsoil permeability is predominantly classed as 'Moderate'. Therefore, the GSI vulnerability rating has been used to determine the thickness of up to 3m across the subject site. All watercourses within the subject site have been given a 5m buffer of no development and field drains have been given a 2m buffer zone. Operations and activities that have the potential to impact on the water environment will be regularly monitored throughout the construction of the Proposed Development. Upon the end of the operational phase of the Proposed Development, the land shall be reinstated to its former agricultural use.

- 7.5.3. In their response to the appeal, the First Party confirms that the surface run-off rate from the proposed development will not exceed the current greenfield run-off rates and that pollution prevention measures are outlined in the OCEMP that will ensure watercourses are protected.
- 7.5.4. I am satisfied that surface water will continue to be accommodated by the existing original drainage and infiltration pattern on the site via the network of perimeter drains. Subject to appropriate design specifications, the installation of solar PV arrays will not give rise to increased surface water runoff in an agricultural setting. It is not anticipated that the development will adversely affect the existing or proposed drainage regime and will not be affected from any flooding issues.
- 7.5.5. In common with most development projects, there is a risk that works may give rise to contamination or the release of silt/ sediment to watercourses. In this regard, the OCEMP identifies mitigation measures, including standard construction measures to address potential impacts on water quality. In addition, the application proposes that a 5m buffer zone/ separation from watercourses will be maintained during works. Having regard to the relatively low intensity nature of construction activity, limited excavation requirements and standard construction mitigation measures, I consider the potential for impacts on water quality would be satisfactorily mitigated and no significant effects are considered likely.
- 7.5.6. I have assessed the proposed development and when considering the objectives as set out in Article 4 of the Water Framework Directive to protect and, where necessary, restore surface and ground waterbodies in order to reach good status (meaning both good chemical and good ecological), and to prevent deterioration. In having considered the nature, scale and location of the project, I am satisfied that it can be eliminated from further assessment because there is no conceivable risk to any surface and/ or ground waterbodies.
- 7.5.7. The reason for this conclusion is based on the nature of works/ development. I conclude that on the basis of objective information, that the proposed development will not result in a risk of deterioration on any waterbody (rivers, lakes, groundwaters, transitional and coastal) either on a temporary or permanent basis and consequently can be excluded from further assessment.

7.6. Roads and Traffic

- 7.6.1. The First Party outlines in Technical Appendix 5: Construction Traffic Management Plan (CTMP) the levels of traffic that will be generated in the both the construction and operational phases. The site will be accessed from three separate access points the L4205 (Site Access 1) and the unnamed local road (Site Access 2 and 3) which runs along the northern boundary of the subject site. These local roads can be accessed from the R703 regional road, as well as the R448 regional road. The road network is of reasonable quality and during my visit to the site and surrounding area, I observed relatively low volumes of traffic on both the local and regional roads.
- 7.6.2. The First Party estimates that construction traffic activity will be for a period of approx. 12 months. It is estimated that up to 1,638 no. two-way heavy goods vehicles (HGV) movements will be required during this period with a peak of 20 daily deliveries. The First Party has confirmed in the FI response to KCCC that all HGV deliveries will be made to the subject site through Site Access 1 on the L4205. During the operational phase, the proposed development would be predominantly operated and monitored remotely with occasional visits (1 LGV per 7-10 days) for maintenance purposes.
- 7.6.3. The Appellants contend that the roads and traffic proposals are unacceptable, and particularly the southern entrance. A number of the Observers also raise the issue that the road infrastructure is inadequate and highlight concerns about the haul route and proposed passing bays.
- 7.6.4. In their response to the appeal, the First Party confirms that sightlines will be available at the southern entrance without interfering with 3rd party properties. The First Party also confirmed that the northern access is no longer proposed to be used as a haul route and that the proposed local road L4025 is suitable for a haul route as it is presently being used by agricultural vehicles and HGVs. They also confirm that all passing bays are within the council-controlled roadway verge and that drawings of these proposals are accurate.
- 7.6.5. I have reviewed the First Party's estimates of construction traffic, particularly in relation to panel deliveries and the requirements for imported aggregates and conclude that they are not unreasonable or inconsistent with other similar development proposals elsewhere. In light of the revised proposals for amendments

- to the proposed haul route submitted as part of the FI response to KCCC where the northern access points are omitted, I consider that the surrounding road network is adequate in terms of quality and capacity to accommodate the short-term construction traffic movements which would arise, subject to a final construction traffic management plan being agreed with the local authority. The Board should note that KCCC have also confirmed this in their response to the appeal.
- 7.6.6. Operational traffic volumes will be very low/ minimal and will not impact on the surrounding road network. In this regard and as per above, I note that the First Party has stated in their response to the appeal that the northern access points are for operational and maintenance access only with intermittent use by light goods vehicles.
- 7.6.7. Having reviewed the relevant drawings, it is considered the access designs can achieve the sight line visibility requirements in accordance with development plan and that the provision of the proposed passing bays can be achieved. To achieve this a small amount hedgerow removal is required. In their response to the appeal, KCCC confirm that the Roads Design Engineer is broadly satisfied with the proposals but, for clarity, proposes some amendments to conditions to be attached to a grant of permission. If the Board is minded to grant permission, I recommend that a condition be attached for a final CTMP to be agreed with the planning authority prior to commencement of development where these can be incorporated.
- 7.6.8. I am satisfied that it is unlikely, subject to mitigation measures, that significant impacts would arise on the traffic, transport and road safety as a result of the proposed development.

7.7. Flooding

7.7.1. A Flood Risk and Drainage Impact Assessment (FRA) is set out in Technical Appendix 4 of the application which concluded that the risk of flooding to the proposed development is minimal, and that the development will not increase the risk of flooding elsewhere. The assessment focused particularly on the watercourses at the site and mapping which shows the subject site is wholly located in Flood Zone C and not liable to flooding. It should also be noted that there are no known flood events at the site.

- 7.7.2. The Appellant contends that the FRA is based on an incomplete drainage scheme. In their response to the appeal, the First Party reiterates that the site is located in Flood Zone C and no impact is anticipated to or from the proposed development in relation to flooding. As the Planning System and Flood Risk Management Guidelines consider water compatible developments appropriate in any flood zone (Flood Zone A, B, C), and the 'highly vulnerable' infrastructure such as inverter stations are located in Flood Zone C, the Justification Test does not need to be applied.
- 7.7.3. I note that the Sugarstown watercourse enters the site from the eastern boundary and flows through Fields 33 to 37 and runs in a western direction before converging with the Dungarvan Glebe Stream approximately 2km west of the subject site, which then joins the River Nore approximately 4.4km southwest of the subject site. The East Kilfane watercourse and the Kilfane West stream are located c.200m outside of the subject site to west and south, respectively. These then also eventually drain to the River Nore.
- 7.7.4. Effectively, rainwater falling onto each panel will drain freely onto the ground beneath the panels and infiltrate the ground at the same rate as it does in the site's existing greenfield state. As a result of the Proposed Development, the extent of hardstanding is indicated at approximately 5,052.1m² or 0.5% of the total site area. Based on the areas of hardstanding introduced, a surface water runoff rate of 96m³ is calculated to accrue as a result of the proposed development. This amount of runoff will need to be controlled by SuDs and the First Party proposes to construct multiple filter drains/ soakaways within the subject site and for the battery storage and grid area.
- 7.7.5. On the basis of the information provided by the applicant, relevant mapping and data from the OPW and the nature, characteristics of the site and design of the proposed development, the conclusion of the FRA is considered reasonable. I, therefore, consider it unlikely, that significant impacts would arise from flood risk.

7.8. Residential Amenity

7.8.1. There are several properties which adjoin or are adjacent to the proposed development. It is accepted that there is no guidance in respect of setback distances but in the absence of same direction can be derived from the prevailing development

plan for the area which provides sufficient basis for an assessment. In this instance there is sufficient potential to mitigate landscape and visual impacts through appropriate siting, design and screening with hedges in spite of the proximity to residential dwellings. It is also noted that the inverter stations, which are noise generating, will be located at a sufficient distance from the nearest residential dwelling. This is considered reasonable, and the solar farm generally does not give rise to significant pollution during the operation phase. A condition to manage operational noise at appropriate levels is recommended below.

- 7.8.2. During the construction phase there will be routine construction related pollution and nuisance generated including noise (pile driving), light, dust and traffic related impacts with the potential to cause nuisance and impact on the amenities of adjoining dwellings. These impacts will be temporary and short-term and would be controlled as part of the standard and best practice construction measures as well as specific mitigation measures set out in the CEMP.
- 7.8.3. During the operational phase there will be some pollution and nuisance associated with the maintenance of the solar farm owing mainly to noise (inverter stations), light and traffic. The operational phase may see small numbers of people using the site as well as remote operation of CCTV and lighting for security purposes. These impacts will be controlled as part of the standard and best practice operation measures. In addition, a condition limiting noise output is recommended to ensure compliance with established standards for rural areas

7.9. Biodiversity

- 7.9.1. This section concerns general biodiversity and in particular the potential for impacts on habitats and species which are not qualifying interests of European sites. Matters relating to European Sites will be considered below in Section 8 below. Similarly, issues related to soil and water are addressed in the Section 7.5 above to avoid repetition and duplication. However, it is acknowledged that these topics interact.
- 7.9.2. The subject site does not have any specific natural heritage designations. There is no Natural Heritage Area of relevance in this instance due to lack of any source-pathway-receptor.

- 7.9.3. The use of the site by any species is limited given the existing use for agriculture. As a result of the agricultural use the majority of the site is improved agricultural grassland. Overall, the site is not considered to be environmentally sensitive and has capacity to absorb the proposed development subject to standard and best practice construction and operation measures.
- 7.9.4. The proposed development will result in the direct loss and potential disturbance to over 1km of hedgerows but 1,463m of new hedgerow and an additional 385.4m of screen planting (hedgerow and trees) will be created. The environment of wider areas of improved agricultural grassland will be changed as a result of the installation of the solar panels. However, the site will be enhanced through a range of measures to manage biodiversity, which are outlined in the Biodiversity Management Plan (BMP).
- 7.9.5. Temporary construction phase impacts including noise, dust and traffic impacts may also arise and disturb streams, hedgerows, trees. The proposed development will result in some disruption of existing habitats on site and disturbance/ displacement of species using the site. There were no rare or notable plant or faunal species recorded on the site during survey. Mitigation measures are considered sufficient in this respect. It is also noted by the applicant that no invasive flora species were identified on site.
- 7.9.6. From the survey work undertaken it was identified that certain trees were recorded as having bat roost potential. The hedgerows and treelines offer suitable foraging and commuting habitat for bats. In total in the region of 1,039m hedgerow are to be removed. In addition, existing hedgerow and treelines are to be augmented and to the preponderance of comparable habitat in the vicinity, the development will not result in an adverse impact on bats.
- 7.9.7. Although some sections of hedgerow will be removed, primarily to provide access, I do not consider it to be significant, and on the basis of the mitigation measures the proposed development will not have an adverse impact on any species. There is some evidence from studies in the UK in particular, that solar farms can increase the diversity of plant species growing at a site, relative to arable lands or pasture, and so encourage pollinating insects. In this regard, implementation of the applicant's

- Biodiversity Management Plan could make a positive contribution for breeding and wintering birds.
- 7.9.8. The construction in proximity to watercourses has the potential for significant impacts and this point is made in the Third-Party appeal and the observations. However, the proposed development does not involve instream construction works, other than placing pre-cast culverts, and there will be no direct impacts to the watercourses subject to standard and best practice construction measures. I am satisfied that the potential for indirect impacts from runoff of pollutants and sediment is comprehensively mitigated.
- 7.9.9. Given the limited nature of mammal and bird activity on the subject site, I agree with the assessment within the Ecological Appraisal where it is considered that there will be no significant negative effects on habitats, or fauna (otters, bats, amphibians and birds) as a result of the proposed development.
- 7.9.10. There is no strong basis or authoritative evidence to conclude that the proposed solar farm development would have significant negative effects on wildlife or breeding and farmland birds occurring in the area, either direct or indirect impacts such as displacement, particularly where the lands are actively farmed. I accept that some disturbance is likely to arise during construction, however, the period of construction activity is relatively limited and will move relatively quickly between areas on the site and there will remain extensive alternative habitats available in the immediate vicinity.
- 7.9.11. Identified mitigation measures include the following:
 - Appropriate measures to avoid pollution of the local watercourses,
 - Avoidance of construction works where possible during the bird breeding season,
 - Replacement of lost habitat with habitat of equivalent value for local fauna, and
 - Mammal friendly fencing to prevent obstruction to local mammals.
- 7.9.12. I am satisfied that significant negative effects on biodiversity, subject to mitigation measures, will be avoided by the proposed development.

7.10. Archaeology

- 7.10.1. The First Party submitted a geophysical survey with the planning application, and this highlighted a number of magnetic anomalies that may be of archaeological origin. Targeted trial trenching is recommended prior to commencement of development on all interpreted probable or possible archaeology where a construction project is planned.
- 7.10.2. The Appellant highlights that archaeological concerns are addressed by means of a condition rather than by survey. However, I note the comments of the DAU reflecting this in their initial report where they sought further information in the form of an Archaeological Impact Assessment (AIA). Although no AIA was submitted in response to the FI request due to stated time constraints, the DAU confirmed that there was no objection to a grant of permission and archaeological mitigation conditions were recommended (per Planner's Report dated 12th October 2023).
- 7.10.3. On the advice of the DAU, I note that KCCC included a bespoke archaeological condition on the notification of the grant of permission issued on the 13th of October 2023. I am satisfied that this condition would ensure that the archaeological requirements are understood by relevant professionals during the construction phase. It is noted that the applicant is willing to accept such a condition. The Board should note that the condition is bespoke, and it is advised to maintain it should the Board be minded to grant planning permission.
- 7.10.4. I consider it unlikely, subject to mitigation measures and conditions, that significant impacts would arise on archaeology. I therefore consider the proposed development to be acceptable in this regard.

7.11. Other Issues

Validity of Application

7.11.1. The Appellant contends that the planning application to KCCC was invalid due to, inter alia, inadequate EIA screening, inadequate AA, public notices, failure to advertise substantial further information, landowner consent, project splitting, length of permission, duration of development, lack of assessment on agricultural land, and the WFD was not addressed.

- 7.11.2. I have assessed the planning issues within these earlier in this report. I also advise the Board that public notices and decision not to request the advertisement of further information are matters for KCCC.
- 7.11.3. As part of the further information response the applicant states that the subject solar farm development is not strategic infrastructure and that the future grid connection would be subject of an application to the Board under strategic infrastructure development provisions. I do not consider that there is a requirement including in the context of the O'Grianna judgement for consideration of the future substation development under this appeal.
- 7.11.4. I am also satisfied from the Board's perspective that it has adequate information before it in order to comply with the relevant legislative provisions and discharge its statutory function as the competent authority. The appellant specifically raises EIA and Sweetman -v- An Bord Pleanála & Ors [2020] and issues therein. This is addressed in Section 5.5 above and Appendix 1 below. I am satisfied that the proposed development does not require EIA.

Duration of Permission

- 7.11.5. The application has sought a 10-year life of permission. Such duration would be consistent with previous decisions of the Board in respect of such infrastructure developments and is considered reasonable having regard to the scale of development and requirements in respect of grid connection.
- 7.11.6. I note overall national policy in support of the expansion of solar energy generation. The application indicates that the development will have an operational life of 40-years and this appears reasonable in the context of increased knowledge relating to the durability of the proposed infrastructure. KCCC have imposed a bond condition to secure satisfactory reinstatement of the site, in an amount to be agreed. I am satisfied that both the duration of the permission issued allowing 10 years to complete the development and 40 years operational life are appropriate for this type of development.

Decommissioning

7.11.7. A decommissioning plan is a common feature in renewable energy projects, and it is stated in the KCCDP that such a plan 'should be included as a standard component

- of a planning application for utility scale solar PV'. The First Party submitted a Decommissioning Report as part of the FI submitted to KCCC. KCCC attached a condition to the notification of the decision to grant permission requiring that a bond to be agreed with KCCC to ensure reinstatement of the site.
- 7.11.8. In their response to the appeal, the First Party further outlines the decommissioning process. The applicant has confirmed that at the end of the project lifetime, the solar panels will be completely dismantled, and the site will be restored to its preconstruction state.
- 7.11.9. The 12 month decommissioning phase will involve disconnecting the PV facility from the power grid, recycling individual PV modules, removing electrical interconnection and distribution cables, recycling support steel and electrical devices, dismantling CCTV and fencing. It is also noted that the First Party will be legally obliged to dispose of panels using suitably licenced operators and facilities.
- 7.11.10. If the Board is minded to grant permission, I recommend that a condition be attached requiring a bond to secure satisfactory reinstatement of the site on cessation of the project. This provides the First Party with the financial incentive to ensure the full reinstatement of the site and enables KCCC to carry out the decommissioning works if ever be called on to do so. It should also be noted that the terms of this permission are subject to enforcement under Part VIII of the PDA and KCCC may take such further action necessary, through its own enforcement powers and that of the judicial system as required to ensure the permission is complied with including its decommissioning phase.
- 7.11.11. I note the transmission infrastructure is not included in this planning application and its decommissioning is not under consideration and can be dealt with under that application should it arise.

Material contravention

7.11.12. If the Board considers that the proposed development does materially contravene the development plan and is minded to grant permission having regard to other policy objectives, it would be precluded from granting permission in the circumstance where the planning authority has refused permission unless one of the limited criteria set out under 37(2)(b) of the Act is met.

My comment in this regard are:

- In my opinion the development of a solar energy development of this scale would not be considered to be of strategic or national importance.
- There are no conflicting objectives or objectives which are not clearly stated.
- The development is not necessary to meet regional planning objectives or other obligations.
- The pattern of development in the area is unaltered and no significant relevant permissions have been granted since the adoption of the 2021-2027 development plan.

Property devaluation

7.11.13. With respect to property devaluation, subject to appropriate mitigation including by condition and the maintenance of suitable distances and provision of landscaping I do not consider that the proposed development would lead to property devaluation at a level as to warrant a refusal of permission.

Public consultation

7.11.14. It appears to me that the legal requirements were adhered to. The appointment of a community liaison officer would mitigate concerns relating to public consultation during construction.

Fire safety

7.11.15. Third party submissions relating to future fire safety response are noted. In notifying the Applicant of the decision to grant permission, KCCC advised the Applicant of requirements under the Building Control Regulations including the need to obtain a Fire Safety Certificate for certain types of development and the need to obtain same prior to commencement of development. There is no role for the Board in this matter.

8.0 Appropriate Assessment

8.1. Screening Determination

- 8.1.1. In accordance with Section 177U(4) of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided in the AA Screening Report, and supporting information, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and proximity and functional relationship between the proposed works and the European sites and their conservation objectives, I conclude that the proposed development could result in significant effects on the River Barrow and River Nore SAC and the River Nore SPA.
- 8.1.2. Appropriate Assessment is therefore required to determine if adverse effects on the integrity of these sites can be ruled out. There is also the potential likelihood for significant in-combination effects with other plans or projects or activities.
- 8.1.3. The potential for significant effects on the conservation objectives of the Thomastown Quarry SAC and the Blackstairs Mountains SAC as well as other European Sites outside of the zone of influence can be screened out with confidence because of the separation distances and the lack of substantive ecological linkages or pathways between the proposed works and these European sites.
- 8.1.4. It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] is required on the basis of the effects of the project 'alone'.
- 8.1.5. In reaching the conclusion of the screening assessment, no account was taken of measures intended to avoid or reduce the potentially harmful effects of the project on any European Site.

(See Appendix 2)

8.2. Appropriate Assessment

- 8.2.1. The development of a solar PV energy development with associated battery storage compound has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended.
- 8.2.2. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on the River Nore SPA (Site code: 004233) and the River Barrow and River Nore SAC (Site code: 002162).

- 8.2.3. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of those sites in light of their conservation objectives.
- 8.2.4. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of those European Sites in view of their Conservation Objectives.
- 8.2.5. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.
- 8.2.6. This conclusion is based on:
 - A full and detailed assessment of all aspects of the proposed project including proposed mitigation and ecological monitoring measures.
 - Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.
 - Careful consideration of the implications of the loss of small areas of benthic
 habitat within the estuary, which is assessed as not being significant to the
 overall functioning of the SAC or SPA and will not impact on the overall integrity
 of these sites.
 - No adverse effects on the Kingfisher, the only Special Conservation Interest bird species of the SPA, following the application of mitigation measures.
 - Taking full account of all proposed mitigation measures which will ensure no adverse effects on the qualifying interests of the SAC, including the Sea and River lamprey and Otter, their habitats or prey upon which they are dependant.
 - No significant effects on the qualifying interests of European sites or supporting habitats, arising from operational airborne pollution.
 - No reasonable scientific doubt as to the absence of adverse effects on the integrity of the River Nore SPA (site code: 004233) or the River Barrow and River Nore SAC (site code: 002162).

(See Appendix 3)

9.0 Recommendation

Having regard to the foregoing it is recommended that permission be granted for the proposed development.

10.0 Reasons and Considerations

Having regard to:

- a) The nature, scale and extent of the proposed development,
- b) The national targets for renewable energy contribution to the overall national grid,
- c) The national, regional and local policy support for developing renewable energy, in particular:
 - i. Climate Action Plan 2024,
 - ii. Climate Action and Low Carbon Development Act 2015 (as amended),
 - iii. Project Ireland 2040 National Planning Framework (2018),
 - iv. National Development Plan 2021-2030,
 - v. National Energy Security Framework (April 2022),
 - vi. National Energy & Climate Action Plan 2021-2030,
 - vii. Southern Regional Spatial & Economic Strategy, and
 - viii. Kilkenny City & County Development Plan 2021-2027,
- d) the likely significant effects on European sites arising from the proposed development, including the location of the proposed development and the separation distance from the Natura 2000 sites,
- the likely consequences for the proper planning and sustainable development in the area arising from the proposed development and the relevant provisions of the Kilkenny City and County Development Plan 2021-2027 and objectives and the results of the Strategic Environmental Assessment and Appropriate Assessment of this plan undertaken in accordance with the SEA Directive (2001/42/EC),

- f) the planning application particulars submitted by the applicant including the response to submissions on the appeal,
- g) the submissions made by prescribed bodies and reports of the local authority in respect of the proposed development,
- h) the report and recommendation of the Inspector,

it is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with the provisions of the Kilkenny City and County Development Plan 2021-2027, would not have an unacceptable impact on the character of the landscape or on cultural or archaeological heritage, would not seriously injure the visual and residential amenities of the area, would be acceptable in terms of public health, traffic safety and convenience, would not have undue impacts on surrounding land uses, would not have an unacceptable impact on ecology or on any European Site, would not lead to an increased risk of flooding within the site or adjoining lands, and would make a positive contribution to Ireland's requirements for renewable energy in accordance with national regional and local policy.

The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

Appropriate Assessment

AA Stage 1:

The Board noted that the proposed development is not directly connected with, or necessary for the management of a European Site.

The Board considered the Screening Report for Appropriate Assessment and all other relevant submissions 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 River Barrow and River Nore SAC [002162] and River Nore SPA [004233] and considered the nature, scale, and location of the proposed development, as well as the report of the Inspector.

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 site was designated and in the connections to and distance between the application site, River Barrow and River Nore SAC [002162] and River Nore SPA [004233] required further investigation.

AA Stage 2:

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposed development for the of River Barrow and River Nore SAC [002162] and River Nore SPA [004233]. 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 Barrow and River Nore SAC [002162] and River Nore SPA [004233] or any other European Site in view of the sites' Conservation Objectives.

11.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application submitted to the planning authority on the 27th day of February 2023 and the further plans and particulars submitted on the 19th day of September 2023, except as may otherwise be required in order to comply with the following conditions.

Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

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

Reason: Having regard to the nature of the development, the Board considers it appropriate to specify a period of validity of this permission in excess of five years.

3. All of the environmental, construction, ecological and heritage-related mitigation measures, as set out in the Planning Report and its associated appendices, Biodiversity Enhancement Action/ Management Plan and the Construction and Environmental Management Plan, and other particulars submitted with the application, shall be implemented in full by the developer, except as may otherwise be required in order to comply with the conditions of this Order.

Reason: In the interests of clarity and of the protection of the environment during the construction and operational phases of the development.

- 4. (a) The permission shall be for a period of 40 years from the date of the commissioning of the solar array. The solar array and related ancillary structures shall then be removed, and the site reinstated unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.
 - (b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority.

(c) On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations/ anchors, and all associated equipment, shall be dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.

Reason: To enable the planning authority to review the operation of the solar farm having regard to the circumstances then prevailing, and in the interest of orderly development.

5. This permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.

Reason: In the interests of clarity

6. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services. The developer shall agree such details in writing with the planning authority prior to commencement of development.

Reason: In the interest of environmental protection.

- 7. a) Prior to the commencement of development pre-commencement surveys for protected plant, animal species and invasive species shall be undertaken at the site and where required the appropriate licence to disturb or interfere with same shall be obtained from the National Parks and Wildlife Service.
 - b) Any tree or vegetation removal works that are required as part of this development should, where possible, be done outside of the bird nesting season from March 1st until August 31st inclusive.

Reason: In the interest of wildlife protection.

8. Before construction commences on site, details of the structures of the security fence showing provision for the movement of mammals at regular

intervals along the perimeter of the site shall be submitted for prior approval to the Planning Authority. This shall be facilitated through the provision of mammal access gates designed generally in accordance with standard quidelines for provision of mammal access (NRA 2008).

Reason: To allow wildlife to continue to have access across the site, in the interest of biodiversity protection.

- 9. (a) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.
 - (b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.
 - (c) Cables within the site shall be located underground.
 - (d) The power stations, transformers/ inverters and BESS containers shall be dark green in colour.

Reason: In the interests of clarity and of visual and residential amenity.

10. Site development and building works shall be carried out only between the hours of 0800 to 1800 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

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

- 11. The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard:
 - (a) The developer shall employ a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry and Archaeological Impact Assessment to include pre-development archaeological testing in areas of proposed ground disturbance and to assess the results and veracity of the results of the geophysical survey that was carried out under Licence No. 22R0307.

- (b) The archaeologist shall submit an Archaeological Impact Assessment report for the written agreement of the planning authority, following consultation with the Department of Housing, Local Government and Heritage, in advance of any site preparation works or groundworks, including site investigation works/ topsoil stripping/ site clearance and/or construction works. The report shall include an archaeological impact statement and mitigation strategy. Where archaeological material is shown to be present, avoidance, preservation in-situ, preservation by record (archaeological excavation) and/or monitoring may be required.
- (c) Any further archaeological mitigation requirements specified by the planning authority, following consultation with the Department of Housing, Local Government and Heritage shall be complied with by the developer. No site preparation and/or construction works shall be carried out on site until the archaeologist's report has been submitted to and approval to proceed is agreed in writing with the planning authority.
- (d) The planning authority and the Department of Housing, Local Government and Heritage shall be furnished with a final archaeological report describing the results of any subsequent archaeological investigative works and/or monitoring following the completion of all archaeological work on site and the completion of any necessary postexcavation work. All resulting and associated archaeological costs shall be borne by the developer.
- (e) The Construction Environment Management Plan (CEMP) shall incorporate all significant findings from any archaeological or cultural heritage constraints relevant to the proposed development and decommissioning.

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

12. A finalised Landscape Mitigation Plan and Biodiversity Management Plan for the proposed development, in accordance with that submitted, shall be

submitted to, and agreed in writing with, the planning authority prior to commencement of development. The site shall be managed in accordance with the agreed plans. These plans shall cover a period of at least five years and shall include details of the arrangements for its implementation.

Reason: To ensure the preservation and protection of flora and fauna within the site, and provide for the satisfactory future maintenance of this development in the interest of visual amenity.

- 13. The construction of the development shall be managed in accordance with a Construction and Environmental Management Plan, to include a Construction Traffic Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including:
 - (a) Details of the site and materials compound(s) including area(s) identified for the storage of construction refuse,
 - (b) Details of areas for construction site offices and staff facilities,
 - (c) Details of site security fencing and hoardings,
 - (d) Details of on-site car parking facilities for site workers during the course of construction.
 - (e) Details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site,
 - (f) Measures to obviate queuing of construction traffic on the adjoining road network,
 - (g) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network,
 - (h) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,

- (i) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained.
 Such bunds shall be roofed to exclude rainwater,
- (j) Off-site disposal of construction/ demolition waste and details of how it is proposed to manage excavated soil, and
- (k) Means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains.

A record of daily checks that the works are being undertaken in accordance with the Construction & Environmental Management Plan shall be kept for inspection by the planning authority.

Reason: In the interest of amenities, public health, and safety.

14. The final details of the operational access arrangements shall be submitted to and agreed in writing with the planning authority, prior to commencement of development. Any gates shall open inwards only.

Reason: In the interests of traffic safety.

15. All road surfaces, culverts, watercourses, verges and public lands shall be protected during construction and, in the case of any damage occurring, shall be reinstated to the satisfaction of the planning authority. Prior to commencement of development, a road condition survey shall be taken to provide a basis for reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In order to ensure a satisfactory standard of development.

- a) During the operational phase of the proposed development, the noise level arising from the development, as measured at the nearest noise sensitive location shall not exceed:
 - (i) An LAeqT value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive. [The T value shall be one hour.]
 - (ii) An LAeqT value of 45 dB(A) at any other time. [The T value shall be 15 minutes]. The noise at such time shall not contain a tonal component.

At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site.

b) All sound measurement shall be carried out in accordance with ISO Recommendation R 1996 "Assessment of Noise with respect of Community" as amended by ISO Recommendations R 1996 1, 2 or 3 "Description and Measurement of Environmental Noise" as applicable.

Reason: To protect the amenities of property in the vicinity of the site.

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

Reason: To ensure satisfactory reinstatement of the site.

18. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

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.

Liam Bowe Senior Planning Inspector

4th December 2024

Appendix 1 - Form 3

EIA Screening Determination

A. CASE DETAILS		
An Bord Pleanála Case Reference	ABP-318433-23	
Proposed Development Summary	Solar PV energy development with associated battery storage compound	
	Yes/ No/ or N/A	Comment (if relevant)
Was a Screening Determination carried out by the PA?	Yes	EIA not required
2. Has Schedule 7A information been submitted?	Yes	
3. Has an AA screening report or NIS been submitted?	Yes	AA screening report and NIS
4. Is an IED/ IPC or Waste Licence (or review of licence) required from the EPA? If YES has the EPA commented on the need for an EIAR?	No	
5. Have any other relevant assessments of the effects on the environment which have a significant bearing on the project been carried out pursuant to other relevant Directives – for example SEA?	Yes	SEA carried out with KCCDP

B. EXAMINATION			
Characteristics of proposed development (including demolition, construction, operation, or decommissioning)			
1.1 Is the project significantly different in character or scale to the existing surrounding or environment?	Whilst the site area is notable, the provision of solar farm developments in rural landscapes is well established and increasingly commonplace in terms of rural diversification.	No	
1.2 Will construction, operation, decommissioning or demolition works causing physical changes to the locality (topography, land use, waterbodies)?	Many of the fields in the area are enclosed by mature hedgerow and tree lines. Although the proposed development will extend across the extensive site area, the extent of hedgerow boundary removal is minimal and not exceptional in the context of this rural area. The development will also be screened in part through the retention and reinforcement of existing boundary hedgerows with further mitigation provided by additional landscaping.	No	
1.3 Will construction or operation of the project use natural resources such as land, soil, water, materials/minerals or energy, especially resources which are non-renewable or in short supply?	The solar photovoltaic panels will be set within galvanised metal framework racks anchored to ground by shallow piles avoiding the need for concrete works. The cells will be in an elevated position to allow for airflow around the modules to avoid overheating; to provide safe clearance for sheep to graze beneath the panels; and to encourage vegetation growth below the panels. While some comparatively minor excavations will be required for construction of the subject works (i.e. the upgrading and extension of the access track, the provision of the temporary construction compound, and the construction of the	No	

	substation), these will be limited in extent.	
1.4 Will the project involve the use, storage, transport, handling or production of substance which would be harmful to human health or the environment?	Construction, operation and decommissioning of the development will not result in any significant emissions to human health or the environment.	No
1.5 Will the project produce solid waste, release pollutants or any hazardous/ toxic/ noxious substances?	There will be limited waste generated during the construction and decommissioning phases and this will be segregated, stored and disposed of appropriately. Best practice measures will be put in place during the construction and decommissioning phases.	No
1.6 Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	The drainage strategy set out in the Drainage Impact Assessment details the SuDS measures to be implemented on site, the design of which will limit surface water discharge from the proposed development to that of the pre-development greenfield site.	No
1.7 Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	Some noise and vibration impacts during construction. Temporary duration – 12 months, construction hours controllable, localised impact. Mitigation measures proposed in submitted CEMP.	No
1.8 Will there be any risks to human health, for example due to water contamination or air pollution?	Construction, operation and decommissioning of the development will not result in any significant emissions to human health.	No
1.9 Will there be any risk of major accidents that could affect human health or the environment?	No. Temporary duration – 12 months, construction hours controllable, localised impact.	No

1.10 Will the project affect the social environment (population, employment)?	Minor positive effect on local employment.	No
1.11 Is the project part of a wider large- scale change that could result in cumulative effects on the environment?	No	No
2. Location of proposed development		
 2.1 Is the proposed development located on, in, adjoining or have the potential to impact on any of the following: a) European site (SAC/ SPA/ pSAC/ pSPA) b) NHA/ pNHA c) Designated Nature Reserve d) Designated refuge for flora or fauna e) Place, site or feature of ecological interest, the preservation/ conservation/ protection of which is an objective of a development plan/ LAP/ draft plan or variation of a plan? 	There are direct hydrological and ecological connections to the River Barrow & River Nore SAC (Site Code: 002162); and ornithological connectivity to the River Nore SPA (Siet Code: 004233). Following an Appropriate Assessment, it has been concluded that the proposed development, individually or in combination with other plans or projects, would not adversely affect the integrity of any of these European sites, in view of their Conservation Objectives.	No
2.2 Could any protected, important or sensitive species of flora or fauna which use areas on or around the site, for example: for breeding, nesting, foraging, resting, over-wintering, or migration, be significantly affected by the project?	Surveys information submitted with Schedule 7A information found no evidence of sensitive species on the site or in the vicinity likely to be affected.	No
2.3 Are there any other features of landscape, historic, archaeological, or cultural importance that could be affected?	No evidence of archaeological features on site. Archaeological monitoring during construction with preservation in situ proposed as mitigation measures.	No
2.4 Are there any areas on/around the location which contain important, high quality or scarce resources which could be affected by the project, for example: forestry, agriculture, water/coastal, fisheries, minerals?	No such resources on or close to the site.	No

2.5 Are there any water resources including surface waters, for example: rivers, lakes/ponds, coastal or groundwaters which could be affected by the project, particularly in terms of their volume and flood risk?	Site is not located within a flood zone.	No	
2.6 Is the location susceptible to subsidence, landslides or erosion?	No evidence of these risks.	No	
2.7 Are there any key transport routes (e.g. National primary Roads) on or around the location which are susceptible to congestion, or which cause environmental problems, which could be affected by the project?	No	No	
2.8 Are there existing sensitive land uses or community facilities (such as hospitals, schools etc) which could be significantly affected by the project?	No	No	
3. Any other factors that should be considered which could lead to environmental impacts			
3.1 Cumulative Effects: Could this project together with existing and/or approved development result in cumulative effects during the construction/operation phase?	A substation will need to be provided adjacent to the proposed development. No significant cumulative effects envisaged.	No	
3.2 Transboundary Effects: Is the project likely to lead to transboundary effects?	No	No	
3.3 Are there any other relevant considerations?	No	No	
C. CONCLUSION			
No real likelihood of significant effects on the environment.	V	EIAR Not Required	
Real likelihood of significant effects on the environment.		EIAR Required	

D. MAIN REASONS AND CONSIDERATIONS

Having regard to:

- (a) The nature and scale of the proposed development, which is significantly under the 2km threshold in respect of Class 10(dd) (Infrastructure private roads) of the Planning and Development Regulations 2001 (as amended)
- (b) The nature and scale of the proposed development, which is significantly below the threshold of 4km for hedgerow removal reinserted by the 2023 amending regulations and is also below the screening threshold set out in the 2011 (Agricultural) Regulations,
- (c) The location of the site on lands presently in use for agricultural purposes and the results of the strategic environmental assessment of the Kilkenny City & County Development Plan 2021-2027 undertaken in accordance with the SEA Directive (2001/42/EC),
- (d) The location of the site in a rural area and the existing pattern of development in the vicinity,
- (e) The location of the site outside of any sensitive location specified in article 109(4)(a) of the Planning and Development Regulations 2001 (as amended) and the absence of any relevant connectivity to any sensitive location,
- (f) the guidance set out in the "Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development", issued by the Department of the Environment, Heritage and Local Government (2003), and
- (g) the criteria set out in Schedule 7 of the Planning and Development Regulations 2001 (as amended), it is considered that the proposed development would not be likely to have significant effects on the environment and that the preparation and submission of an environmental impact assessment report is not therefore required.

Inspector:	Date:	
Approved (DP/ADP):	Date:	

Appendix 2: AA Screening Determination

Screening for Appropriate Assessment Screening Determination

Description of the project

I have considered the proposed solar PV energy development with associated battery storage compound in light of the requirements of S177U of the Planning and Development Act 2000 (as amended).

The proposed development, as described in section 3 of this report and in section 2 of the Natura Impact Statement, comprises a solar PV energy development with associated battery storage compound. The proposed development will be located in a rural setting in Co. Kilkenny and consists of 45 fields currently used as pasture and covers a total area of c.104 ha. It is located c.4.24km northeast of the River Barrow and River Nore Special Area of Conservation and the River Nore Special Protection Area. The subject site is also located c.4.3km northeast of Thomastown Quarry Special Area of Conservation, and c.14.2km west of the Blackstairs Mountains Special Area of Conservation.

The Sugarstown watercourse enters the site from the eastern boundary and flows through Fields 33 to 37 and runs in a western direction before converging with the Dungarvan Glebe Stream approximately 2km to the west. This stream connects to the River Nore c.4.24km southwest of the subject site. This forms the connection with the River Nore SPA and River Barrow and River Nore SAC. There are no direct ecological or hydrological links between the subject site and either the Thomastown Quarry SAC or the Blackstairs Mountains SAC.

I note and accept the conclusion in the applicant's Stage 1 AA Screening which concluded that there is hydrological connectivity between the subject site and the River Barrow and River Nore SAC as well as the River Nore SPA. In addition, there is ecological connectivity between the subject site and the River Barrow and River Nore SAC. Therefore, progression to a Stage 2 Natura Impact Statement is required.

Potential impact mechanisms from the project

The proposed development will not result in any direct effects such as habitat loss on any European Site.

Sources of impact include:

• Changes in water quality due to water discharge into the Sugarstown Stream.

Where an ecological pathway exists, these direct impacts could negatively alter the quality of the existing environment, negatively affecting qualifying interest species and habitats that are dependent on high water quality.

European Sites at Risk

Table 1: European Sites at risk from impacts of the proposed project			
Effect mechanism	Impact pathway/	European Site(s)	Qualifying interest
	Zone of influence		features at risk
Surface and ground	Surface water	River Nore SPA	Kingfisher
water management	discharge into the	(004233)	
Ecological link -	Sugarstown		
foraging	watercourse		
Surface and ground	Surface water	River Barrow and	Mudflats and
water management	discharge into the	River Nore SAC	sandflats not
	Sugarstown	(002162)	covered by seawater
Coological link	watercourse		at low tide
Ecological link - foraging			Reefs
			Salicornia and other
			annuals colonising
			mud and sand
			Atlantic salt
			meadows
			Mediterranean salt
			meadows

Water courses of
plain to montane
levels with the
Ranunculion
fluitantis and
Callitricho-
Batrachion
vegetation
European dry
heaths
Hydrophilous tall
herb fringe
communities of
plains and of the
montane to alpine
levels
Petrifying springs
with tufa formation
Old sessile oak
woods with llex and
Blechnum in the
British Isles
Alluvial forests with
Alnus glutinosa and
Fraxinus excelsior
Desmoulin's Whorl
Snail
Freshwater Pearl
Mussel
White-clawed
Crayfish
Sea Lamprey
Brook Lamprey

	River Lamprey
	Twaite Shad
	Salmon
	Otter
	Killarney Fern

The Board should note that I have only included those sites with any possible ecological connection or impact pathway in this screening determination.

I draw the Board's attention to the appellants' assertion of a possible hydrological connection to Hugginstown Fen SAC. The subject site is located c.17km northeast of Hugginstown Fen SAC and I am satisfied that the subject site has no pathway to this Natura 2000 site and that significant effects on this SAC can be ruled out.

Likely significant effects on the European sites 'alone'

Table 2: Could the project undermine the conservation objectives 'alone'				
		Could the conserva	tion objectives be	
European Site	Conservation objective	undermined (Y/N)?		
and qualifying	(summary)	Ecological link	Surface and ground	
feature			water management	
River Barrow	River Barrow and River			
and River Nore	Nore SAC National Parks			
SAC (002162)	<u>& Wildlife Service</u>			
	(npws.ie)			
Estuaries	To maintain the favourable	N	Y	
	conservation condition			
Mudflats and	To maintain the favourable	N	Y	
sandflats not	conservation condition			
covered by				
seawater at low				
tide				
		l .	1	

Reefs	Not stated	N	Y
Salicornia and	To maintain the favourable	N	Y
other annuals	conservation condition		
colonising mud			
and sand			
Atlantic salt	To restore the favourable	N	Y
meadows	conservation condition		
Mediterranean	To restore the favourable	N	Y
salt meadows	conservation condition		
Water courses	To maintain the favourable	N	N
of plain to	conservation condition		
montane levels			
with the			
Ranunculion			
fluitantis and			
Callitricho-			
Batrachion			
vegetation			
European dry	To maintain the favourable	N	N
heaths	conservation condition		
Hydrophilous	To maintain the favourable	N	N
tall herb fringe	conservation condition		
communities of			
plains and of			
the montane to			
alpine levels			
Petrifying	To maintain the favourable	N	N
springs with	conservation condition		
tufa formation			
Old sessile oak	To restore the favourable	N	N
woods with Ilex	conservation condition		
and Blechnum			

in the British			
Isles			
Alluvial forests	To restore the favourable	N	N
with Alnus	conservation condition		
glutinosa and			
Fraxinus			
excelsior			
Desmoulin's	To maintain the favourable	N	Y
Whorl Snail	conservation condition		·
Freshwater	Currently under review	N	Υ
Pearl Mussel	Currently under review	IN	Ť
Pean Mussel			
Nore freshwater	To restore the favourable	N	Υ
pearl mussel	conservation condition		
White-clawed	To maintain the favourable	N	Υ
Crayfish	conservation condition		
Sea Lamprey	To restore the favourable	Y	Υ
	conservation condition		
Brook Lamprey	To restore the favourable	Y	Υ
	conservation condition		
River Lamprey	To restore the favourable	N	Υ
	conservation condition		
Twaite Shad	To restore the favourable	N	Υ
	conservation condition		
Salmon	To restore the favourable	N	Υ
	conservation condition		
Otter	To restore the favourable	Y	Υ
	conservation condition		
Killarney Fern	To maintain the favourable	N	N
	conservation condition		
River Nore	River Nore SPA National		
SPA (004233)	Parks & Wildlife Service		

Kingfisher	To maintain the favourable	Υ	Υ
	conservation condition		

I conclude that the proposed development would have a likely significant effect 'alone' on all of the qualifying interests of the River Nore SPA and the River Barrow and River Nore SAC from effects associated with deterioration of water quality and the ecological link for some Annex I and II species, namely kingfisher and otter. An appropriate assessment is required on the basis of the effects of the project 'alone'.

Further assessment in-combination with other plans and projects is not required at this time.

Overall Conclusion - Screening Determination

In accordance with Section 177U(4) of the Planning and Development Act 2000 (as amended) and on the basis of objective information.

I conclude that the proposed development is likely to have a significant effect on all of the qualifying interests of the River Nore SPA and the River Barrow and River Nore SAC from effects associated with deterioration of water quality and ecological link.

It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] is required on the basis of the effects of the project 'alone'.

No measures intended to avoid or reduce harmful effects on European sites were taken into account in reaching this conclusion.

Appendix 3: Appropriate Assessment

The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177U and 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section. The areas addressed in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive,
- Screening the need for appropriate assessment,
- The Natura Impact Statement and associated documents, and
- Appropriate assessment of implications of the proposed development on the integrity of each European site.

Compliance with Article 6(3) of the EU Habitats Directive

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).

Screening Determination

Following the screening process, it has been determined that Appropriate
Assessment is required as it cannot be excluded on the basis of objective
information that the proposed development of a solar PV energy development with
associated battery storage compound individually or in-combination with other plans

or projects will have a significant effect on the following European sites (i.e., there is the possibility of significant effect):

- River Nore SPA (site code: 004233)
- River Barrow and River Nore SAC (site code: 002162)

The possibility of significant effects on all other European sites has been excluded on the basis of objective information.

Measures intended to reduce or avoid significant effects have not been considered in the screening process.

The Natura Impact Statement

The application included a Natura Impact Statement prepared by Neo Environmental Limited dated the 30th of January 2023, which examines and assesses potential adverse effects of the proposed development on the following European Sites:

- River Nore SPA (site code: 004233), and
- River Barrow and River Nore SAC (site code: 002162).

The applicant's NIS was prepared in line with current best practice guidance. The applicant's NIS concluded that:

- all aspects of the proposed development project have been identified which, in the light of the best scientific knowledge in the field, can by themselves or in combination with other plans or projects, affect the European sites in the light of its conservation objectives;
- there are complete, precise and definitive findings and conclusions regarding the identified potential effects on any European site;
- on the basis of those findings and conclusions, the competent authorities are able to determine that no scientific doubt remains as to the absence of the identified potential effects; and
- thus, the competent authorities may determine that the proposed development will not adversely affect the integrity of any European Site.

Having reviewed the documents, submissions and consultations with the NPWS, I am satisfied that the information allows for a complete assessment of any adverse effects of the development, on the conservation objectives of the following European sites alone, or in combination with other plans and projects:

- River Nore SPA (site code: 004233), and
- River Barrow and River Nore SAC (002162).

Appropriate Assessment of implications of the proposed development

The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European sites using the best scientific knowledge in the field. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

The following Guidance was adhered to in my assessment:

- DoEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland:
 Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service.
- EC (2002) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC.
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC].

European Sites

The following sites subject to Appropriate Assessment:

- River Nore SPA (site code: 004233), and
- River Barrow and River Nore SAC (site code: 002162).

River Nore SPA

The River Nore SPA is a long, linear site that includes a section from the bridge at Townparks, (north-west of Borris in Ossory) to Coolnamuck (approximately 3km south of Inistioge) in Co. Kilkenny. For a large part of its course the River Nore traverses Carboniferous limestone plains; it passes over a narrow band of Old Red Sandstone rocks below Thomastown.

A survey in 2010 recorded 22 pairs of Kingfisher (based on 16 probable and 6 possible territories) within the SPA, a nationally important population of Kingfisher and a species that is listed on Annex I of the E.U. Birds Directive. Other species which occur within the site include Mute Swan, Mallard, Cormorant, Grey Heron, Moorhen, Snipe and Sand Martin.

The foraging range of the Kingfisher can extend over 3-5km depending on food availability. The River Nore SPA is located c.4.24km from the subject site, so it is within this range. I am satisfied that the drainage ditches and small watercourses on site do not have the required environment or do not support an abundant supply of small fish for Kingfishers to forage. Further to this, the subject site is at the extreme end of the foraging range of the Kingfisher and any ornithological link is unlikely. This is supported by the lack of observation of this species during the site surveys. Therefore, I consider it unlikely that significant impacts will accrue to the Kingfisher as a result of the proposed development.

River Barrow and River Nore SAC

This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties – Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. The Nore, for a large part of its course, traverses limestone plains and then Old Red Sandstone for a short stretch below Thomastown.

A description of the sites and their Conservation and Qualifying Interests/ Special Conservation Interests, including any relevant attributes and targets for these sites, are set out in the NIS and summarised in Tables 1 & 2 of the Screening

Determination in Appendix 2 above as part of my assessment. I have also examined the Natura 2000 data forms as relevant and the Conservation Objectives supporting documents for these sites available through the NPWS website (www.npws.ie).

The otter has potential to commute through terrestrial habitats on site and the dry/ wet drainage ditches and watercourses available. Given the proximity of the subject site to the River Barrow and River Nore SAC and the foraging range of the otter, it is possible that they would forage along within the stream. Similarly, it is possible that river lamprey and brook lamprey would utilise the stream if it was wet and flowing. However, I am satisfied that the suite of mitigation measures proposed will ensure no disturbance to the stream environment and no decrease in water quality. Therefore, no significant impacts will accrue to the qualifying interests of the SAC.

The Nore freshwater pearl mussel is found in specific areas restricted to a small number of locations of the River Nore, some downstream of the subject site. Given the proposed mitigation measures to protect water quality in the on-site streams, I also agree with the conclusion in the NIS that there will be no significant impact on this species or on the Atlantic Salmon (intermediary host for the freshwater pearl mussel).

Mitigation Measures

The applicant has proposed a series of mitigation measures. A summary assessment of these measures is provided in Table 1 below.

Table 1: Summary of assessment of mitigation measures					
Mitigation	Assessment	Implementation	Monitoring		
Measures					
Finalise CEMP and	Reduce potential of	Applicant/	Appointment of		
implementation	adverse effects to	Contractor	qualified person to		
	water quality of		implement CEMP		
	River Nore if		during period of		
	implemented		construction		
Buffers of 5m along	As above	As above	As above		
all watercourses					

SuDS and the use of	As above	As above	As above
silt traps within the			
ditches			
No use of wet	As above	As above	As above
concrete within 10m			
of the drainage ditch			
No petroleum-based	Reduce potential of	As above	As above
products will be	adverse effects to		
stored within the	the surface water or		
construction area	groundwater		
Security fencing to	Reduce potential of	As above	N/A
have mammal gates	adverse effects on		
to allow free	otter		
movement of otter			
through the site			

In-Combination Effects

There is potential for water emissions from the project alone and in combination with other plans and projects to undermine the conservation objectives of the Natura 2000 network. Two small planning consents (KCCC ref. no.'s 17739 and 17800) are listed in Table 8-1 of the NIS. These developments are greater than a distance of 4km upstream/ downstream of the development site. I am satisfied that these and other small residential and agricultural developments in the area present no significant risk of acting in-combination with the proposed development. Therefore, there will be no cumulative loss of habitat if the proposed development is consented.

Integrity Test

Following the appropriate assessment and the consideration of mitigation measures, I am able to ascertain with confidence that the project would not adversely affect the integrity of the River Nore SPA (site code: 004322) or the River Barrow and River Nore SAC (site code: 002162) in view of the Conservation Objectives of these sites.

Appropriate Assessment Conclusion

The development of a solar PV energy development with associated battery storage compound has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 (as amended).

Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on the River Nore SPA and the River Barrow and River Nore SAC. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of those sites in light of their conservation objectives.

Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the River Nore SPA (site code: 004322) or the River Barrow and River Nore SAC (site code: 002162), or any other European site, in view of the sites' Conservation Objectives.

This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of the River Nore SPA (site code: 004322) or the River Barrow and River Nore SAC (site code: 002162).
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.
- The development of a solar PV energy development with associated battery storage compound will, through the design and application of mitigation measures, ensure the preservation of the favourable conservation status of habitats characterised as being in favourable status and ensure that habitat characterised as being in unfavourable status will not be further harmed or rendered difficult to restore to favourable status.
- The development of a solar PV energy development with associated battery storage compound will, through the design and application of mitigation

- measures as detailed and conditioned ensure the lasting preservation of the essential components and characteristics of the European Sites.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the River Nore SPA and the River Barrow and River Nore SAC.

Table 2: AA Summary Matrix for River Nore Special Protection Area

Table 2: River Nore SPA [004233]

Summary of key issues that could give rise to adverse effects:

- Changes in water quality during construction impacting on habitats
- Changes in water quality during construction impacting on species

Conservation objectives: see CO004233.pdf

Summary of Appropriate Assessment

Qualifying Interest Feature	Conservatio n objectives targets and attributes	Potential adverse effects	Mitigation measures	In- combinatio n effects	Can adverse effects on integrity be excluded?
Kingfisher	To restore the favourable conservation condition	The site is hydrologically linked to the SAC/ habitat via the existing surface water drainage system which discharges directly to the Sugarstown stream.	Construction — A final CEMP will be completed by the contractor and a Method Statement will be drawn up detailing how the works will be carried out in compliance with the mitigation measures.	There is no potential for the proposed development to undermine the integrity of River Nore SPA, acting incombination with other plans or projects.	Adverse effects on the site can be excluded and with the implementation of the mitigation measures the potential for significant effects can be ruled out.

Overall conclusion: Integrity test

Following the implementation of mitigation, the construction and operation of the proposed development will not adversely affect the integrity of River Nore SPA in light of the site's conservation objectives. No reasonable scientific doubt remains as to the absence of such effects.

Table 3: AA Summary Matrix for River Barrow and River Nore Special Area of Conservation

Table 3: River Barrow and River Nore SAC [002162]

Summary of key issues that could give rise to adverse effects:

- Changes in water quality during construction impacting on habitats
- Changes in water quality during construction impacting on species

Conservation objectives: see ConservationObjectives.rdl (npws.ie)

	Summary	v of Aı	ppropriate	Assessment
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Qualifying Interest Feature	Conservatio n objectives targets and attributes	Potential adverse effects	Mitigation measures	In- combinatio n effects	Can adverse effects on integrity be excluded?
Estuaries	To maintain the favourable conservation condition	The site is hydrologically linked to the SAC/ habitat via the existing surface water drainage system which discharges directly to the Sugarstown stream.	Construction — A final CEMP will be completed by the contractor and a Method Statement will be drawn up detailing how the works will be carried out in compliance with the mitigation measures. Buffers of 5m along all watercourses SuDS and the use of silt traps within the ditches No use of wet concrete within 10m of the drainage ditch No petroleum-based products will be stored within the	There is no potential for the proposed development to undermine the integrity of River Barrow and River Nore SAC, acting incombination with other plans or projects.	Yes Adverse effects on the site can be excluded and with the implementation of the mitigation measures the potential for significant effects can be ruled out.

			construction area Security fencing to have mammal gates to allow free movement of otter through the site		
Mudflats and sandflats not covered by seawater at low tide	To maintain the favourable conservation condition	As above	As above	As above	As above
Reefs	Not stated	As above	As above	As above	As above
Alluvial forests with Alnus glutinosa and Fraxinus excelsior	To restore the favourable conservation condition	No hydrological pathway	N/A	None	N/A
Salicornia and other annuals colonising mud and sand	To maintain the favourable conservation condition	The site is hydrologically linked to the SAC/ habitat via the existing surface water drainage system which discharges directly to the Sugarstown stream.	As above per estuaries	As above per estuaries	As above per estuaries
Atlantic salt meadows	To restore the favourable conservation condition	As above	As above	As above	As above

Mediterranean salt meadows	To restore the favourable conservation condition	As above	As above	As above	As above
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho- Batrachion vegetation	To maintain the favourable conservation condition	As above	As above	As above	As above
European dry heaths	To maintain the favourable conservation condition	No hydrological pathway	N/A	As above	As above
Petrifying springs with tufa formation	To maintain the favourable conservation condition	No hydrological pathway	N/A	As above	As above
Old sessile oak woods with llex and Blechnum in the British Isles	To restore the favourable conservation condition	No hydrological pathway	N/A	As above	As above
Alluvial forests with Alnus glutinosa and Fraxinus excelsior	To restore the favourable conservation condition	No hydrological pathway	N/A	As above	As above
Desmoulin's Whorl Snail	To maintain the favourable conservation condition	The site is hydrologically linked to the SAC/ habitat via the existing surface water drainage system which discharges directly to the	As above per estuaries	As above per estuaries	As above per estuaries

		Sugarstown stream.			
Freshwater Pearl Mussel	Under review	Water quality impacts on Salmon could indirectly impact on the designated Freshwater Pearl Mussel	As above	As above	As above
Nore Freshwater Pearl Mussel	To restore the favourable conservation condition	As above	As above	As above	As above
White-clawed Crayfish	To maintain the favourable conservation condition	The site is hydrologically linked to the SAC/ habitat via the existing surface water drainage system which discharges directly to the Sugarstown stream.	As above	As above	As above
Sea lamprey	To restore the favourable conservation condition	As above	As above	As above	As above
Brook Lamprey	To restore the favourable conservation condition	As above	As above	As above	As above
River lamprey	To restore the favourable conservation condition	As above	As above	As above	As above
Twaite Shad	To restore the favourable	As above	As above	As above	As above

	conservation condition				
Salmon	To restore the favourable conservation condition	As above	As above	As above	As above
Otter	To maintain the favourable conservation condition	As above	As above	As above	As above
Killarney Fern	To maintain the favourable conservation condition	No hydrological pathway	N/A	As above	As above

Overall conclusion: Integrity test

Following the implementation of mitigation, the construction and operation of the proposed development will not adversely affect the integrity of River Barrow and River Nore SAC in light of the site's conservation objectives. No reasonable scientific doubt remains as to the absence of such effects.