



An
Bord
Pleanála

Inspector's Report ABP 318306-23

Development

The extension of the operational lifespan of a solar farm permitted by Carlow County Council under planning Reg. Ref. 22/118 from 35 years as permitted (by reason of condition no. 3 of permission planning Reg. Ref. 22/118) to 40 years.

Location

Kilcarrig, Bagenalstown, Co. Carlow.

Planning Authority

Carlow County Council

Planning Authority Reg. Ref.

2360159

Applicant(s)

EEPV8 Limited

Type of Application

Normal Planning Appeal

Planning Authority Decision

Refuse Permission

Type of Appeal

First Party

Appellant(s)

EEPV8 Limited

Observer(s)

None

Date of Site Inspection

06th June 2024

Inspector

Brendan Coyne

Contents

1.0 Site Location and Description	3
2.0 Proposed Development	3
3.0 Planning Authority Decision	3
3.1. Decision	3
3.2. Planning Authority Reports	4
4.0 Planning History.....	7
5.0 Policy and Context.....	9
5.1. Development Plan.....	9
5.2. Relevant Government Policy / Guidelines.....	12
5.3. Designated Protected Areas	13
6.0 The Appeal	14
6.1. Grounds of Appeal	14
6.2. Planning Authority Response.....	23
6.3. Observations.....	24
7.0 Assessment.....	24
7.2. Operational Lifespan of the Permitted Solar Farm	24
7.3. Appropriate Assessment Screening	26
8.0 Recommendation.....	27
9.0 Reasons and Considerations.....	27
10.0	29

1.0 Site Location and Description

- 1.1. The site is situated in the townland of Kilcarrig, approximately 1 km southeast of Bagenalstown, Co. Carlow. The site is accessed from the southern side of the local road L70031, which connects to the Regional Road R724, located c. 500m to the northwest. The L70031 road provides access to Kilcarrig Quarry, Bagenalstown ESB substation, and a cemetery further to the east. Additionally, it facilitates access to rural housing and other rural development along its route. The site encompasses an area of 14.16 hectares and primarily consists of relatively flat terrain. Currently utilised as agricultural pastureland, the site is delineated by hedgerows and trees along its northern and western boundaries. There are no water features present on the site. Agricultural buildings are situated on adjoining lands to the southwest of the site. The surrounding environs include Kilcarrig Quarry to the north and one-off rural dwellings.

2.0 Proposed Development

2.1. Application as lodged to the Planning Authority on 03/08/2023

Permission is sought for the extension of the operational lifespan of a solar farm permitted by Carlow County Council under Planning Reg. 22/118 from 35 years, as originally permitted (by reason of Condition No. 3 of permission Planning Reg. 22/118), to 40 years.

3.0 Planning Authority Decision

3.1. Decision

Carlow County Council REFUSED permission for the proposed development. The reason for refusal was as follows;

- 1. The proposed development to extend the operational lifespan of the solar farm as permitted under planning permission reg. ref. 22/118 (from 35 years to 40 years) would materially contravene Condition no. 3(a) of this permission, which restricts the operational lifespan of the solar farm to 35 years, and would hinder the Planning Authority's ability to review the operation of the solar farm over the stated time period having regard to the circumstances then prevailing in the*

industry and any change in circumstances relating to the proper planning and sustainable development of the area. The proposed development, if permitted, would set an undesirable precedent to similar such developments in the County, would materially contravene Condition no. 3(a) attached to parent permission reg. ref. 22/118 as noted in the foregoing, and would therefore be contrary to the proper planning and sustainable development of the area.

3.2. Planning Authority Reports

The Planner's report is consistent with the decision of the Planning Authority and is summarised as follows:

- The Applicant requests an extension of the operational lifespan for a solar farm under Planning Reg. 22/118 from 35 to 40 years, with no additional changes to the existing solar photovoltaic farm setup.
- Supporting documents submitted with the application are unchanged from those originally filed under the parent permission, alongside a new cover letter and Planning Report that discuss relevant planning and environmental aspects linked to the extension request.
- The Applicant's Planning Report provides a rationale for extending the operational period, referencing previous assessments by the Planning Authority of the initial 35-year period.
- No national guidelines currently regulate the operational lifespan of solar farms; however, recent draft guidelines (*'Best Practice Planning Guidance Report for Large Scale Ground-Mounted Solar Energy Development in Ireland'*, prepared by Fehily Timoney Consultants in association with Irish Solar Energy Association) suggest a minimum 35-year lifespan to optimise environmental and sustainable energy benefits, with the physical lifetime of solar photovoltaic equipment now extending to at least 40 years.
- Carlow County Council's standard practice, aligned with many Planning Authorities, has been to grant solar farm operational periods of 35 years, with recent exceptions in Tipperary and Offaly, where 40-year periods were approved.

- An examination of An Bord Pleanála's records indicates a general standard of 35 years for solar farm operational lifespans, with only three exceptions seeking 40 years noted, two of which were adjusted back to 35 years (ABP Ref; 311831- 21 and 310367-210, and one refusal under ABP Ref 31507122).
- The proposed lifespan extension would contravene Condition No. 3 (a) of the original grant of permission, which specifies a 35-year limit from the date of commissioning, requiring removal of the installation unless further permission is granted for retention prior to this term's end.
- This Condition enables periodic review of the solar farm's operations, allowing the Planning Authority to consider retention or extension based on the circumstances prevalent at the time of review.
- Given the lack of statutory national guidelines and the existing Conditions' provisions, the Planning Authority recommends refusing the request for an extension to a 40-year operational period.

3.2.1. Other Departmental Reports

3.2.1.1. Environment Department

The Senior Executive Engineer's Report requested the following information:

- Confirm the expected maximum generation output in megawatts (mW) for the solar farm, as this information is not included in the submitted documents.
- Confirm the solar panel sizes at this time.
- Confirm whether the planned main inverters, as opposed to the micro-inverters previously discussed, are still intended for use in the project.

3.2.1.2. Environment Department

The Executive Engineer's Report recommends granting permission for the extension of the operational lifespan of a solar farm from 35 to 40 years, under Planning Regulation 22/118, subject to conditions requiring:

- Maintenance of the ground beneath solar panels as grassland to prevent erosion and manage water flow.

- Arrangement of solar panels to allow natural rainwater infiltration at rates similar to greenfield areas.
- Regular maintenance and reseeded of grassland to avoid soil compaction.
- On-site management of all surface water to prevent ponding under panels and on public roadways.
- Construction of site roads with permeable gravel to facilitate water absorption and prevent sediment dispersion.

3.2.1.3. **Municipal District Engineer:**

The recommendation is to grant permission subject to several conditions, including:

- All surface water generated on-site must be contained within the site, using soakaways designed according to BRE Digest 365 specifications.
- No water from the entrance road should flow onto the public road to prevent risks to road users.
- The developer must not interfere with the public road or footpath without prior agreement with the Municipal Engineer to protect the integrity of nearby roads infrastructure.
- Roadside drainage must not be altered without initial consultation and approval by the Municipal Engineer to maintain the quality of road drainage systems.
- No materials associated with the development may be stored or deposited on the public road during the construction period without prior consent from the Municipal Engineer.
- The public roads must be kept free of muck and debris during construction to ensure public safety.
- Any required openings in adjacent public roads or footpaths will necessitate a Road Opening License application in accordance with the 2017 Guidelines for Managing Openings in Public Roads.

3.2.2. Prescribed Bodies

3.2.2.1. Department of Housing, Local Government and Heritage - Development Applications Unit:

The report is summarised as follows -

- The Development Applications Unit has reviewed the planning application documents and highlights that the archaeological mitigation measures outlined in Condition No. 18 of the original permission (Planning Ref. 22/118) remain applicable and must be implemented during the construction stage.
- The reason for enforcing archaeological mitigation is to ensure the continued preservation of archaeological interests, either in situ or by record, such as caves, sites, features, or other objects of archaeological significance.

3.3. Submissions

3.3.1. None received.

4.0 Planning History

4.1.1. Subject Site

PA Ref. 22118: Permission was granted on 11/04/2023 for a solar farm covering approximately 14.16 hectares. This development consists of photovoltaic panels mounted on ground frames, four single-storey inverter/transformer stations, one single-storey terminal station, one single-storey electrical switch room, one storage container, security fencing, CCTV, and all associated ancillary development works. Elgin Energy Services Ltd. has applied for this solar farm to have a planning permission valid for 10 years, with an operational period of 40 years.

Notable Conditions include the following;

2. The development permitted shall be completed within 10 years from the date of the final grant of permission.
3. This permission shall be for a period of 35 years from the date of the commissioning of the solar farm. The solar farm, including all solar panels, infrastructure, and ancillary structures, must be removed at the end of this

period unless further planning permission for retention is granted. Before the commencement of development, a detailed restoration plan must be approved by the Planning Authority. If the solar farm is decommissioned, stops operating for over a year, or reaches the end of the 35-year period, all structures shall be dismantled and the site restored as per the approved plan within three months of decommissioning.

P.A. Ref. 16289: Planning permission was granted to Elgin Energy Services Limited on 27/01/2017 for a solar farm covering approximately 14.16 hectares. The approved development includes photovoltaic panels on ground-mounted frames, four single-storey inverter/transformer stations, one single-storey terminal station, one single-storey electrical switch room, one storage container, security fencing, CCTV, and all associated ancillary development works. The permission expired on 28/02/2022 and development did not commence.

Adjacent Site to the North

PA Ref. 2360158: Permission was granted on 25/09/2023 to relocate and redesign a single-storey medium voltage electrical substation. This substation was previously approved as part of a solar farm by Carlow County Council under Planning Registration 22/118. The revised proposal includes a single-storey 20kV substation at a new location within the already permitted solar farm site. Additionally, the the proposal provides for a turning area adjacent to the proposed substation to facilitate emergency fire tender access. It also includes revisions to the permitted layout of solar panels to accommodate both the relocated substation and the new turning area.

Condition No. 1 of this permission requires the following;

- (a) The development shall be carried out in accordance with the plans and particulars received by the Planning Authority on 03/08/2023 except where altered or amended by conditions in this permission.
- (b) Apart from the departures authorised by this permission, the development shall be carried out fully in accordance with planning permission Reg. Ref. 22/118 and any agreements entered into thereunder.

- (c) This permission shall expire on the date on which planning permission Reg. Ref. 22/118 expires (i.e.10/04/2033).

Reason: To enable the Planning Authority to check the development when completed, by reference to the approved particulars.

5.0 Policy and Context

5.1. Development Plan

Carlow County Council Development Plan 2022-2028 is the statutory plan for the area. The following policies and objectives are considered relevant:

Chapter 1: Introduction

S. O8: Transition to a low carbon and climate resilient County by developing renewable indigenous energy resources, by supporting energy efficiency, reducing energy demand, and by implementing mitigation and adaptation responses to climate change.

Section 4.4.4 Placemaking and Sustainable Design

PM. O4: Encourage energy efficiency and use of renewable energy in new developments and to seek to incorporate energy sustainability into the planning of new and existing employment areas.

Section 6.7.3 Energy Infrastructure – Policies

E.I. P1 Support and facilitate the reinforcement and development of enhanced energy infrastructure, and associated networks, to serve the existing and future needs of the County and Region. This will include the delivery of the necessary integration of transmission network requirements facilitating linkages of renewable energy proposals to the electricity and gas transmission grid, in a sustainable and timely manner, subject to proper planning and environmental considerations.

Section 7.10.1 Renewable Energy

RE. P1: Encourage and facilitate the production of energy from renewable sources, such as from wind, **solar**, bioenergy, hydroelectricity, and

geothermal, subject to compliance with proper planning and environmental considerations.

RE. P2: Support the co-location of renewable energy technologies on a case-by-case basis subject to compliance with planning and environmental criteria.

RE. O1: Seek to achieve a minimum of 130MW of renewable electricity in the County by 2030, by enabling renewable energy developments, and through micro-generation including rooftop **solar**, wind, hydro-electric and bioenergy combined heat and power (CHP).

Section 7.10.3.2 Solar Energy – Policies:

S.E. P1: Favourably consider the redevelopment of brown field sites for solar P.V. projects subject to proper planning and environmental considerations.

S.E. P2: Favourably consider the development of solar farms on agricultural lands which allow for farm diversification and multipurpose land use.

S.E. P3: Encourage the use of solar thermal or solar P.V. installations as part of the design and planning process for new developments and refurbishments.

S.E. P4: Promote and facilitate the use of solar technology across County Carlow including schools, public buildings and for infrastructure e.g. traffic lights, streetlights, road information signage etc.

Objectives - It is the policy of the Council to:

S.E. O1: Increase the penetration of solar energy developments at appropriate locations subject to compliance with proper planning and environmental considerations.

S.E. O2: Promote the integration of solar energy into existing and planned developments.

S.E. O3: Investigate the feasibility of promoting solar energy developments on Council owned land and property and to seek the implementation of viable sustainable projects thereby contributing to the transition to a low carbon county.

G.I. P6: Require proposals for large scale developments such as road or drainage schemes, wind farms, solar farms, residential schemes, industrial parks or retail schemes, to submit a green infrastructure plan as an integral part of a planning application.

Chapter 16 Development Management Standards

Section 16.12.4 Solar Energy – The Council will consider solar renewable energy development having regard to the following criteria:

- Any future Section 28 Ministerial Guidance.
- Site suitability.
- Any environmental sensitivities in the landscape.
- Landscape Character Areas of the County.
- Visual impact, zones of influence including cumulative visual impact/zones of influence of existing / permitted solar farms and associated infrastructure such as road access.
- Glint and Glare impacts on roads, dwellings, national monuments, protected structures and other sensitive receptors.
- The need to protect residential amenities of adjoining properties
- Archaeological Impact Assessment and Heritage Impact Assessment.
- Ecological Impact Assessment.
- Landscaping plans to appropriately integrate the development into the landscape.
- Security requirements such as CCTV, security lights, fencing etc.
- Impacts from lighting.
- Construction impacts.
- Impacts on drainage patterns and water tables.
- Suitability of and access to the electricity grid.
- Decommissioning Statement

5.1.1. Carlow County Renewable Energy Strategy 2021 (RES) (Appendix VI).

Chapter 6.2 Solar Energy - Section 6.2.7 Policy and Objectives

Table 6-9: Solar Energy Objectives and Policies – include the following:

Objective S1 Increase the penetration of commercial scale solar energy development in appropriate locations.

Policy S1.1 To favourably consider the redevelopment of brown field sites for large solar P.V. projects.

Policy S1.2 To favourably consider the development of solar farms on agricultural lands which allow for farm diversification and multipurpose land use.

Objective S2 To promote the integration of solar energy into existing and planned developments.

Policy S2.1 To encourage the use of solar thermal or solar P.V. installations as part of the design and planning process for new developments and refurbishments.

Policy S2.2 To promote and facilitate the use of solar technology across County Carlow including schools, public offices and for infrastructure, e.g. traffic lights, streetlights, road information signage etc.

5.1.2. Carlow Climate Change Adaptation Strategy 2019-2024.

LD-8 To encourage where feasible and practical, the provision of photovoltaic solar panels in new residential developments for electricity generation/storage and/or water heating purposes.

5.2. Relevant Government Policy / Guidelines

5.2.1.1. European

Climate and Energy Package 2020.

E.U. Effort Sharing Regulations and Targets.

E.U. Renewable Energy and Efficiency Directives.

E.U. Commission European Green Deal 2019.

5.2.1.2. National

Climate Action Plan 2024

- Target to achieve up to 5 G.W. of solar energy by 2025 and 8 G.W. by 2030.
- Increase in the share of renewable electricity to 80% by 2030.

Climate Action and Low Carbon Development (Amendment) Act 2021.

National Planning Framework (NPF) - relevant provisions include:

National Strategic Outcome 8 - 'Deliver 40% of our electricity needs from renewable sources by 2020 with a strategic aim to increase renewable deployment in line with E.U. targets and national policy objectives out to 2030 and beyond. It is expected that this increase in renewable deployment will lead to a greater diversity of renewable technologies in the mix'.

National Policy Objective 55 – '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'.

National Development Plan (NDP).

Regional Spatial and Economic Strategy 2020 (RSES) for the Southern Region.

Climate Action Plan 2019; To Tackle Climate Breakdown by Government of Ireland.

The Climate Action and Low Carbon Development Act 2015.

Eastern and Midland Regional Assembly – Regional Spatial and Economic Strategy for the Eastern and Midland Region (2019)

Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, (2009)

5.3. Designated Protected Areas

5.3.1. The nearest Natura 2000 European Sites to the appeal site are as follows:

- River Barrow And River Nore SAC (Site Code 002162), approx. 1.1km to the northwest of the site.

- Blackstairs Mountains SAC (Site Code 0007700, approx.. 9.9km to the southeast of the site.
- Slaney River Valley SAC (Site Code 000781), approx. 15.6km to the northeast of the site.
- Ballymoon Esker pNHA (Site Code 0007970, approx. 1km to the northeast of the site.
- Blackstairs Mountains pNHA (Site Code 000770), approx. 9.7km to the southeast of the site.
- Cloghristick Wood pNHA (Site Code 000806), approx. 8km to the northwest of the site.

6.0 The Appeal

6.1. Grounds of Appeal

6.1.1. A first-party appeal was received from RPS Consultants representing the Applicant EEPV8 Limited against the decision made by the Planning Authority to refuse permission for the proposed development. The following is a summary of the grounds of Appeal.

- The planning application documentation lodged with Carlow County Council clearly articulated the reasons for extending the operational period of the permitted solar farm to 40 years, which are considered warranted and appropriate.
- Advances in technology are being researched and progressed, with companies exploring possibilities that could extend solar module lifetimes up to 50 years.
- It is not sustainable to remove panels that can still produce clean electricity at the end of the planning permission period.
- Solar P.V. panels installed now can remain useful for over 40 years, with 99% of modules expected to produce at least 70% of their power from when first installed. This is due to panel degradation occurring far slower than previously thought, thanks to recent advancements in photovoltaic cell and solar energy technology.

- Historically, planning permission for solar P.V. development has been sought for shorter lifespans based on then-current expectations of the technology's efficient lifespan.
- EEPV8 Limited aims to make the solar farm competitive in alignment with the principles of the Renewable Energy Support Scheme (RESS), aiming for cost efficiency and longer operational periods of 40 years based on current technological life expectancies.
- Granting permission for an operational lifespan that aligns with solar technology's expected efficient and useful lifespan supports the three pillars of sustainability: economic, environmental, and social.
- The substantial capital investment required to establish a solar farm is optimised by maximising the use of the asset throughout its life.
- Financial arrangements for the solar farm, including landholding agreements and maintenance contracts, are designed around a 40-year operational life, enhancing economic stability and reducing capital costs.
- Longer operational periods that are now technologically possible allow for reduced capital funding costs and competitive bids in government RESS auctions, leading to lower electricity prices for consumers.
- It is environmentally unsustainable to cease the operation of a solar farm that continues to function efficiently and is located on a site without environmental sensitivities.
- Operating the solar farm for its maximum technological lifespan minimises the demand for new raw materials and waste generation and reduces the need for new sites and the duplication of infrastructure like substations and grid connections.
- Operating the solar farm for the full duration of its technological lifespan delivers direct benefits to the community, including lower energy costs, enhanced security of energy supply, and improved environmental conditions, all of which contribute to societal well-being.
- The request to extend the operational lifespan of the permitted solar farm from 35 to 40 years supports the provision of lower-cost, green energy to the national grid in alignment with current policies aimed at addressing climate change impacts.

- Recent expansions in policy and financial support have specifically targeted the solar energy development sector, aiming for more rapid delivery and greater certainty within the renewable electricity sector.
- Appendix A1 of the Appeal reviews key policy supports that acknowledge the global climate crisis and the need for urgent action to reduce carbon emissions and support the generation of clean, green energy at competitive costs while ensuring security of supply.
- Ireland's hierarchical planning system ensures that lower-tier land use plans support the strategic policies outlined in higher-tier plans, with the development management system providing local, project-level support.
- Notably, policies from REPowerEU, the National Planning Framework, and the Climate Action Plan 2023 highlight the crucial role of the local planning system in achieving strategic renewable energy and carbon reduction goals.
- The Carlow County Council Planners Report for this application (Reg. Ref. 23/60159) identified extensive local, regional, national, and international policy and guidance supporting renewable energy development and climate change mitigation.
- Despite acknowledging these policies, the Planning Authority refused the application to extend the operational lifespan from 35 to 40 years, citing the need to consider site-specific planning and environmental considerations.
- No substantive planning or environmental concerns were identified by the Planning Authority report that would justify limiting the operational lifespan to 35 years or explain why an extension to 40 years would not be appropriate.
- In the absence of any substantive site-specific concerns, the wealth of policy support across all levels justifies the proposed extension to 40 years, supporting the renewable electricity industry.
- Carlow County Council assessed the potential impacts of the overall permitted solar farm under Planning Reg. 22/118 in 2022 and 2023, with further information requested on one specific item concerning potential archaeological impact, necessitating on-site geophysical survey and testing.

- The Planning Authority Reports' assessments revealed no potential ongoing planning or environmental issues requiring continuous review or monitoring after the initial phase of the development. The assessments specifically focused on noise and glint and glare impacts but only in relation to the development's commissioning phase.
- According to the Planning Authority's Reports:
 - The development is relatively small in scale for solar P.V. developments and is not expected to result in significant habitat loss.
 - After assessing the development in line with the E.U. Habitats Directive and considering its proximity to the nearest European Site, it was concluded that the development is unlikely to have significant effects on the European Site. Hence, a Stage 2 Appropriate Assessment was not required.
 - The development is not expected to cause serious injury to residential amenity or road safety hazards due to glint and glare.
 - The solar farm will integrate well into the landscape without significantly injuring the landscape or contravening the County Development Plan.
 - The operational phase of the solar farm is not expected to materially impact local traffic volumes or patterns.
 - Further information regarding archaeological monitoring to protect recorded monuments was justified, with comprehensive reports and reasonable mitigation measures proposed to protect archaeological and cultural heritage.
- Neither of the Council's Planners Reports discussed the proposed 40-year operational lifespan. Despite the absence of any identified planning or environmental concerns, a condition was applied limiting the operational period to 35 years.
- The Planning Authority Report dated 25.09.23 regarding the current application primarily addressed the principle of the proposed development and policies relating to renewable energy. It set out precedents for operational lifespans previously permitted for solar farms but offered limited commentary on potential environmental impacts, deeming it appropriate since the application only seeks to extend the operating period of an already permitted solar farm.

- In Section 4.3 of the report, it was noted that there were no significant planning or environmental impacts or concerns about extending the operational lifespan of the solar farm. The assessment included references to:
 - Supposedly unpublished draft guidelines titled 'Best Practice Planning Guidance Report for Large Scale Ground-Mounted Solar Energy Development in Ireland,' which could not be verified by consultations with relevant departments and online checks.
 - Precedent cases and the need for the Planning Authority to review operations over the extended period considering prevailing circumstances.
- The report incorrectly cited the supposed draft guidelines to support a 35-year operational limit despite acknowledging modern solar P.V. technology's typical lifespan is at least 40 years, suggesting that extending the operational period to 40 years would be more aligned with sustainable development principles.
- The Planning Authority Report also mentioned that operational agreements are typically based around a minimum of 35 years, suggesting that extending the operational lifespan to 40 years would maximise the environmental and sustainable energy benefits. However, the report concluded that permission should be limited to 35 years, a stance that appears contradictory to the principles outlined in the referenced draft guidelines.
- Precedent cases for operational lifespans of solar farms are discussed in the Planning Authority Report, highlighting that a 35-year duration has often been considered the norm by many Planning Authorities based on historical practices where 25 to 30 years were typical.
- The Planning Authority Report notes precedent cases where operational periods of 40 years were deemed acceptable, specifically citing permissions in Counties Tipperary and Offaly, suggesting a trend towards longer operational periods due to advancements in technology and the efficient operation of early solar farms.
- However, the Planning Authority Report incorrectly states that 40-year operational periods are exceptions rather than emerging norms, despite evidence to the contrary. The report refers to the 40-year permissions as anomalies, disregarding the trend of extending operational periods reflected in recent permissions granted across multiple local authorities.

- The Planning Authority's report misinterprets 'draft Guidelines' suggesting a 35-year minimum operational period. These guidelines are inconsistent with modern solar technology's physical lifespan, now expected to be at least 40 years.
- An Bord Pleanála precedent cases (ABP-311831-21 and ABP-310367-21) where 40-year operational periods were sought resulted in only 35 years being granted, with decisions made without significant environmental concerns that would necessitate a shorter lifespan.
- It appears that the restriction to 35 years by the Board was applied purely "in the interests of consistency" with previous cases rather than any reasoned consideration of whether a review of the operation of the solar farm was required in the first instance or why it would be required or appropriate at 35 years compared with 40 years.
- The Applicant states that numerous local authority cases have allowed a 40-year lifespan for solar infrastructure, acknowledging its technical longevity and the increased global and national support for renewable energy, making shorter lifespans for solar farms unsustainable.
- The common rationale for a restricted operational timeframe lacks substantial evidence, especially given the longer technical lifespan expected of modern solar infrastructure.
- The need for the Planning Authority to review the operation of solar farms based on 'prevailing circumstances' is not justified, considering the consistent advancements and expected longevity of renewable energy policies and technologies. This makes the limitation to a 35-year lifespan unfounded.
- The Carlow County Development Plan 2022-2028 sets a broad statutory planning policy context for energy infrastructure and climate action, emphasising the importance of supporting economic growth and sustainable communities through the expansion of energy infrastructure.
- Chapter 7 of the Development Plan focuses on combating climate change by supporting a transition to a low-carbon, resilient future, which includes policies aimed at increasing renewable energy production and efficiency.
- Specific policies supporting renewable energy include encouraging energy production from renewable sources like solar and wind, aiming for at least 130MW

of renewable electricity by 2030, and supporting the development of solar farms on agricultural lands for multipurpose use.

- Development Management Standards provide criteria for assessing solar farm developments, focusing on environmental impact, visual and landscape integration, and archaeological assessments.
- The criteria outlined in the Development Plan support the extension of the operational lifespan of the solar farm to 40 years, ensuring continued site suitability, compliance with security and landscaping measures, and no significant new impacts.
- The Appeal to extend the operational period is based on the established compliance of the solar farm with current planning permissions, with no additional work or impacts expected from the extension. The supportive stance of the plan on renewable energy and climate action justifies the extension, aligning with statutory policy goals.
- The Appellant disputes the need to review the solar farm's operation at or close to the 35-year mark of the currently permitted operational lifespan. They submit that no valid justification exists for requiring such a review at that time, referencing their earlier discussion in section 4.3.3 of the report.
- The technology planned for the solar farm is expected to operate efficiently for over 40 years.
- While it might be appropriate to assess the site's suitability for continued solar operations prior to a complete repowering, a review is not warranted if the infrastructure continues to function effectively and produce renewable electricity.
- In assessing both the original application under Planning Ref. 22/118 and the current application under Planning Ref. 23/60159, no planning or environmental concerns were identified that would necessitate ongoing monitoring or justify a review around the 35-year period.
- The site is situated in a rural area where it is highly unlikely that the site conditions would change significantly enough within the next five years to render it unsuitable for continued use as a solar farm, given that the existing technology is still operating efficiently.

- Strategic policies and local planning objectives are increasingly supportive of renewable energy developments, suggesting a favorable outlook for extending operational lifespans.
- The Appellant submits that a review of the solar farm's operation by the Planning Authority should only be required at the end of the efficient operational lifespan of the infrastructure, which is estimated by industry standards to be at least 40 years. Thus, they reject this reason for the refusal to grant permission for extending the operational lifespan to 40 years.
- The Appellant disagrees with the assertion that granting permission for the proposed development would establish an undesirable precedent. Instead, they submit that it would set a positive precedent by aligning the planning permission with the sustainable use of the solar infrastructure for its full expected efficient lifespan.
- The Appellant submits that many planning authorities have already recognised the benefits of permitting the operation of solar farms for the entire expected lifespan of the technology. This perspective is seen as a positive response in the planning system.
- They further note that affirming permission for an extended operational period at this time would allow operators to plan and finance the projects with a confirmed 40-year period in mind. This longer period for amortising capital costs would lead to lower energy prices for the market.
- The Applicant clarifies that granting permission for an extension of the operational period in this specific case does not automatically imply that all other solar farm developments must also receive a 40-year permit. They acknowledge that if specific site conditions or local environmental concerns exist that genuinely justify an earlier review, those cases could still require different considerations.
- The Appellant outlines in Section 3 of the Appeal report a detailed rationale for the proposed development, emphasising its alignment with development plan policies and its consideration of potential planning and environmental impacts.
- They assert that the proposed development would be supported by policies ranging from international to local levels and has no identified adverse impacts. The

support for the development is based on detailed assessments presented in the appeal documentation.

- The Appellant notes that Carlow County Council has previously deemed the site suitable for a solar farm development for 35 years.
- The Appellant argues there is no justifiable reason to believe that extending the operational period by an additional 5 years would lead to adverse impacts or policy conflicts.
- Additionally, they argue that there is no need for the Planning Authority to review the site's circumstances at or prior to the 35-year mark, as the technology installed is expected to continue operating efficiently for at least another 5 years.
- For these reasons, the Appellant submits that, contrary to the reasons stated for refusal, the proposed development would indeed comply with the principles of proper planning and sustainable development of the area.
- The extension the operational lifespan of an existing solar farm from 35 to 40 years aims to allow the solar farm to continue converting solar energy into sustainable electricity for the national grid for a longer period, aligning with the technical life expectancy of the solar infrastructure and promoting sustainable development.
- The initial approval of the solar farm under parent permission Reg. Ref. 22/118 established the principle of its development at this location as satisfactory to the Planning Authority.
- The current application seeks to amend the operational lifespan to better support the technical capabilities and expected efficiency of the solar infrastructure.
- The application is in full alignment with national, regional, and local planning policies and does not include elements that conflict with these development objectives.
- Local and Regional policies, particularly RSES Objective RPO 87, support low-carbon energy futures and the adoption of renewable energy sources, which is further reinforced by Policies RE.O1 and SE.O1 of the Carlow County Development Plan 2022 - 2024.
- The rationale for the development is centred on four main points: advances in technology and the duration of operational efficiency of the technology; cost efficiency and the provision of lower-cost energy; support for the three pillars of

sustainable development (economic, environmental, and social sustainability); and the current policy context addressing the impacts of climate change.

- The reasons issued by Carlow County Council for refusing the extension do not withstand detailed scrutiny and are contested on the basis of the detailed arguments laid out in the Appeal.
- Consequently, the Appellant submits that the proposed development is in line with strategic policy and the Carlow County Development Plan 2022 - 2024, adhering to the principles of proper planning and sustainable development of the area.
- The Appellant respectfully requests that An Bord Pleanála overturn Carlow County Council's decision and grant planning permission for the proposed extension of the operational lifespan.

6.2. Planning Authority Response

6.2.1. The Planning Authority's response to the grounds of Appeal is summarised as follows:

- The Planning Authority maintains its refusal to extend the solar farm's operational lifespan to 40 years, considering the current 35-year lifespan adequate based on established precedents. This duration allows for periodic review of the solar farm's operation based on prevailing circumstances at that time.
- It is noted that an existing condition in the parent permission permits potential extension of the development's retention before the end of the 35-year period if deemed appropriate, providing flexibility based on future evaluations rather than extending the lifespan now.
- The Planning Authority highlights that the draft guidelines cited in the Appeal are non-statutory, developed by Fehily Timoney and Company and the Irish Solar Energy Association in June 2023, serving as a helpful resource in the absence of statutory guidance.
- The Authority reiterates its position as outlined in the Planner's report and directs the Board to the planning and internal department reports for detailed context on the decision.

6.3. Observations

None

7.0 Assessment

7.1.1. The Appeal pertains solely to one Condition of the planning permission. Having examined the application details and all other documentation on file, and having regard to relevant local/regional/national policies and guidance, I consider that the main issues in this appeal are as follows;

- The Operational Lifespan of the Permitted Solar Farm
- Screening for Appropriate Assessment.

7.1.2. I am satisfied that all other issues were fully addressed by the Planning Authority and that no other substantive issues arise. Accordingly, the issues for consideration are addressed below.

7.2. Operational Lifespan of the Permitted Solar Farm

7.2.1. The planning permission currently governing the solar farm, under P.A. Ref. 22/118, includes Condition No. 3, which limits the operational lifespan to 35 years. EEPV8 Limited has appealed this Condition with the objective of extending its lifespan to 40 years. The Appeal is motivated by significant advancements in solar technology, which they argue, support prolonged operational viability and sustainability of solar farms.

7.2.2. The Appellant's appeal submission presents a strong case for extending the operational lifespan based on several factors, as detailed in Section 6.0 above. In summary, they highlight technological advancements indicating that modern solar panels can maintain high functionality for up to 50 years. Economic arguments are also put forward, suggesting that a longer lifespan would dilute capital costs and improve the competitiveness of the solar farm in the energy market. Environmentally, the Appellant points out that less frequent replacement of infrastructure aligns with sustainable development practices by minimising resource depletion and environmental disruption. The Applicant supports these claims with data on the durability and efficiency degradation rates of current solar panel technology, which bolster the feasibility of a 40-year operational lifespan.

- 7.2.3. The Planning Authority reaffirms its decision to limit the operational lifespan to 35 years, citing established precedents and draft guidelines produced by the Irish Solar Energy Association (ISEA), which recommend a 35-year lifespan as optimal. They acknowledge that these guidelines are non-statutory but argue they provide a useful reference in the absence of statutory national guidelines. Additionally, the Planning Authority notes that existing Conditions allow for the potential extension of the development's operational period before the end of the 35-year term based on a future assessment of circumstances.
- 7.2.4. The request to extend the operational lifespan of the solar farm is strongly supported by objectives and policies outlined in the Carlow County Development Plan 2022-2028, specifically those under sections promoting the transition to a low-carbon and climate-resilient county through the development of renewable energy resources, as detailed in Section 5.0 above. This policy framework encourages the efficient use of renewable technologies and supports initiatives that align with sustainable development goals, making a strong case for reconsidering the operational limit imposed on the solar farm.
- 7.2.5. The environmental assessments conducted as part of the planning applicant process under P.A. Ref. 22118 revealed no significant adverse impacts from the solar farm, which indicates that extending the operational period would likely continue to be environmentally sustainable. The technological advancements and economic benefits argued by the Appellant further undermine the rationale for strictly adhering to a 35-year limit, particularly when similar extensions have been granted in other jurisdictions.
- 7.2.6. I note that Section 5.2.11.2 of the 'Best Practice Planning Guidance Report for Large Scale Solar Energy Development In Ireland' prepared in association with the Irish Solar Energy Association (Nov. 2023), as referred to by the Planning Authority states that *'the minimum of a 35 year duration has been deemed acceptable by Planning Authorities. This is typically secured by way of a planning condition. As of 2023, many Planning Authorities have deemed that a 40-year operation period is now an acceptable duration the operational life for solar developments' (underline emphasis added)*. References are provided to cases, including Kerry County Council PA Ref. 23284, Offaly County Council Planning Reg. Refs. 21123, 218, 2374 and Tipperary County Council Planning Reg. Ref. 19601323.

- 7.2.7. I also note recent decisions by An Bord Pleanála for solar farms imposing conditions providing permission for a period of 40 years from the date of the commissioning of the solar array, e.g. ABP Ref. 317916-23 and ABP Ref.317188-23.
- 7.2.8. Considering the detailed support from both the Carlow County Development Plan and national renewable energy policies, along with the technological evidence and economic rationale provided by the Appellant, it is my view that extending the operational lifespan of the solar farm to 40 years appears to be both reasonable and beneficial. This extension would not only enhance the economic viability of the solar farm but would also contribute positively to achieving County and national renewable energy targets. In the absence of substantive evidence to demonstrate otherwise, I do not consider that extending the operational lifespan of the solar farm by a further five years would have significant adverse impacts on the environment.
- 7.2.9. I, therefore, recommend that permission be granted for the extension of the operational lifespan of the solar farm permitted under PA Ref. 22/118 from 35 years to 40 years. The granting of a 40-year permission does not prevent the replacement of the structures/panels if new, more efficient technology is developed. That is a commercial matter and any planning considerations would be assessed in the normal manner through the submission of a new planning application to the Planning Authority.

7.3. Appropriate Assessment Screening

- 7.3.1. The submitted Appeal is for the extension of the lifespan of the development from 35 to 40 years. There is no watercourse or known ecological pathway between the site and the closest Natura 2000 European Site, the River Barrow And River Nore SAC (Site Code 002162), located c. 1.1km northwest of the site. Screening for Appropriate Assessment was conducted by the Planning Authority for the parent permission P.A. Ref. 22/118, where it was concluded, based on the information available, that the development, on its own or in combination with other plans or projects, would not be likely to result in any potential significant effects on designated European sites and that therefore a stage two Appropriate Assessment was not required. I conclude, therefore, that no Appropriate Assessment issues arise and that the development would likely have a significant effect individually or in combination with other plans or projects on any Natura 2000 European site.

8.0 Recommendation

- 8.1.1. In light of the assessment outlined above, I recommend that planning permission should be granted, subject to the conditions as set out below.

9.0 Reasons and Considerations

- 9.1.1. Having regard to:

- the provisions of national and regional policy objectives in relation to renewable energy,
- the provisions of the Carlow County Development Plan 2022-2028,
- the planning history and existing permitted development on the site.
- the planning history of similar solar farm development,
- the nature and scale of the proposed development,

- 9.1.2. it is considered that subject to compliance with the conditions set out below, the proposal would support national and regional renewable energy policy objectives, would not conflict with the provisions of the Carlow County Development Plan, would not seriously injure the residential amenities of property in the vicinity, would not have significant adverse impacts on the environment, and would, therefore, be in accordance with the proper planning and sustainable development of the area.

Conditions:

1.	<p>a) This permission shall be for a period of 40 years from the date of commissioning of the solar farm permitted herein. The solar farm, including solar panels and related infrastructure and ancillary structures, shall be then removed from the site unless, prior to the end of the 40 years, planning permission shall have been granted for their retention for a further period.</p> <p>b) Prior to the commencement of development, a detailed restoration plan, including a timescale for its implementation, providing for the removal of the solar farm, including solar panels and all related infrastructure and ancillary structures, shall be submitted for the written agreement of the Planning Authority.</p> <p>c) On full or partial decommissioning of the solar farm, or if the development ceases operation for a period of more than one year, the solar farm, including solar panels and all related infrastructure and ancillary structures, shall be dismantled and permanently removed from the site. The site shall be restored in accordance with the restoration plan required under part (b) of this Condition, and all decommissioned structures shall be removed within three months of decommissioning.</p> <p>Reason: To enable the planning authority to consider the impact of the development over the stated time period, having regard to the circumstances then prevailing and in the interest of orderly development.</p>
2.	<p>Apart from any departures specifically authorised by this permission, the development shall be carried out and completed in accordance with the terms and conditions of the permission granted on 11/04/2023 under Planning Register Reference Number 22/118 and any agreements entered into thereunder.</p> <p>Reason: In the interest of clarity and to ensure that the overall development is carried out in accordance with the previous permission.</p>

Brendan Coyne
Planning Inspector

24th June 2024

Appendix 1 - Form 1
EIA Pre-Screening
[EIAR not submitted]

An Bord Pleanála Case Reference	318306-23		
Proposed Development Summary	The extension of the operational lifespan of a solar farm permitted by Carlow County Council under planning Reg. Ref. 22/118 from 35 years as permitted (by reason of condition no. 3 of permission planning Reg. Ref. 22/118) to 40 years.		
Development Address	Kilcarrig, Bagenalstown, Co. Carlow.		
1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (that is involving construction works, demolition, or interventions in the natural surroundings)			
		No X	No further action required
2. Is the proposed development of a class specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) and does it equal or exceed any relevant quantity, area or limit where specified for that class?			
Yes			EIA Mandatory EIAR required
No	X		Proceed to Q.3

3. Is the proposed development of a class specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) but does not equal or exceed a relevant quantity, area or other limit specified [sub-threshold development]?

		Threshold	Comment (if relevant)	Conclusion
No	x	N/A		No EIAR or Preliminary Examination is required

4. Has Schedule 7A information been submitted?

No	N/A	
Yes	N/A	

Inspector: Brendan Coyne Date: 24th June 2024