



An
Bord
Pleanála

Inspector's Report 302456-18

Development	Retention of 21 photovoltaic panels on front roof space of dwelling house
Location	60 Gouldavoher Estate, Limerick
Planning Authority	Limerick City and County Council
Planning Authority Reg. Ref.	18/597
Applicant(s)	Elzbieta Joanna Pasinska
Type of Application	Planning permission
Planning Authority Decision	Refuse permission
Type of Appeal	First Party
Appellant(s)	Elzbieta Joanna Pasinska
Observer(s)	Community Power Friends of the Earth Eamon Ryan T.D. An Taisce Friends of the Irish Environment
Date of Site Inspection	24 th October 2018
Inspector	Mary Kennelly

1.0 Site Location and Description

- 1.1.** The site is located in the Gouldavoher Estate, in the suburb of Dooradoyle, to the south of Limerick City Centre. Gouldavoher Estate is located between Father Russell Road and St. Nessian's Road, to the west of Limerick Regional Hospital. No. 60 is located in the centre of the estate, just to the east of a green open space area. It is a semi-detached two-storey house and is the eastern one of the pair adjoining the green. There are two further pairs of semi-detached houses to the east and a row of similar houses to the south, and beyond the green to the west.
- 1.2.** The site area is stated as 0.041ha. The site was undergoing renovation works at the time of my inspection. I noted that there were a number of PV panels on the roof, which I estimated to be 7 in number.

2.0 Proposed Development

- 2.1.** It is proposed to retain 21 no. Photo Voltaic panels on the southern roof slope at the front of the dwelling. The solar panels are arranged in three rows, with seven panels in each row. The panels occupy the central portion of the roof, from the ridge line to the eaves line. The lateral extent is roughly equivalent to three-quarters of the roof slope. However, as stated above, the number of panels currently on the roof is seven. However, the appellant is seeking permission for 21 no. panels.

3.0 Planning Authority Decision

3.1. Decision

The planning authority decided to refuse for one reason as follows:

The photo voltaic panels, by reason of quality of materials, scale and visual impact on a substantial proportion of the front profile of the roof, create a serious visual intrusion in the residential estate and set an undesirable precedent for similar such development and is considered contrary to Policy Objective ZD 1 Established Residential of the Southern Environs Plan 2011-2017 to protect the amenity of existing occupiers. The development is considered contrary to the proper planning and sustainable development of the area.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The planning report (2/08/18) noted the submission from a number of residents, which related to visual impact arising from the number of panels and the scale of the development, and to the quality of the materials and installation. Reference was made to previous planning history on the site, which related inter alia, to permission for an extension to the rear, side and front followed by a further permission for revisions to the permitted extension. In the interim, permission was refused for 21 PV panels and for a change of use of the garage to a physiotherapy room. It was stated that a Warning Notice was also issued. Concern was expressed regarding the visual impact and precedent. It was also noted that the drawings did not accurately reflect the development existing on site. The P.A. had advised the applicant of exemptions available and that it may accept an alternative proposal.

3.2.2. Other Technical Reports

None.

3.3. Prescribed Bodies

3.3.1 None.

3.4. Third party observations

The observation from the local residents included the names and addresses of 14 no. residents of the estate. Issues raised principally related to the extensive nature of the development which covered more than 50% of the roof slope. Objection was also raised to the unauthorised nature of the development, the visual impact of the development and the unprofessional way in which they were erected. It was pointed out that the same development was the subject of a previous refusal, that notwithstanding this the panels were erected anyway and are now the subject of this retention application.

4.0 Planning History

4.1. The following planning decisions relating to the site are relevant.

17/296 – Permission granted by P.A. in June 2017 for demolition of existing extensions to rear and for construction of an extension to the rear, side and front to include a living room, garage and front porch and all associated works. Permission was granted subject to 18 no. conditions, which were of a standard type. A post-decision submission was made on 18/5/18 seeking advice on whether amendments to the scheme, including the installation of 21 PV panels, would require a separate planning permission. The P.A. advised on 18/06/18 that the proposed amendments would materially alter the permission and that a separate application would be required.

17/736 – Retention permission refused on 22/09/17 for 21 PV panels and to change the use of a domestic garage to a physiotherapy room. Permission was refused for two reasons, the first related to the PV panels and is similar to the reason in the decision currently under appeal, and the second related to the physiotherapy room. The drawings indicate that the panels were located to the southwest of the roof slope, closer to the adjoining dwelling (No. 59).

18/715 – Permission granted for revised extension to dwelling design from that previously granted under planning reference 17/296 (granted 6/9/18). The revisions related to a revised building line for the new side extension and two windows to replace the garage door.

DC-145-17 – Warning Notice served.

5.0 Policy Context

5.1. Limerick County Development Plan 2010-2016 (as extended and varied)

5.1.1. Chapter 4 contains the policies and objectives relating to housing including the following -

HOU P3 seeks to promote high quality living environments in the interest of quality of life and sustainable communities.

5.1.2. Chapter 7 - Environment & Heritage and Chapter 8 - Transport & Infrastructure contain the P.A.'s policies relating to energy efficiency, climate change and the use of renewable energy (pages 7.21-7.22 and 8.30-8.32). Relevant policies include **EH 024 – Renewable Energy Strategy – adopt and implement within lifetime of Plan.** **IN 056 – Adopt a positive approach to renewable energy developments having regard to the following:**

- a) The proper planning and sustainable development of the area.
- b) The environmental and social impacts of the proposed development.
- c) Impact of the development on the landscape.
- d) Where impacts are inevitable, mitigation features have been taken into account.
- e) Protected areas have been taken into account

5.1.3. Chapter 10 contains Development Management Standards.

10.5.7 - House Extensions – The following extracts from the policy are considered relevant:

- High quality designs for extensions will be required that respect and integrate with the existing dwelling in terms of height, scale, materials finishes, and window proportions.
- Extensions which significantly protrude beyond the front building line and/or along the front of the house will not be permitted.

10.13 - Renewable Energy Developments – a favourable approach to applications for renewable energy developments provided they are environmentally sustainable will be adopted. The cumulative effect of such developments on the landscape and the environment will be taken into consideration.

5.2. Southern Environs LAP 2011-2017 (extended to 2021)

5.2.1. The site is zoned **Established Residential ZD1**, the objective for which is to ensure that new development is compatible with adjoining uses, to protect the amenities of existing residential areas and to encourage a high standard of design.

5.2.2. Objective IN11 – it is the objective of the Council to consider applications for individual wind turbines on lands zoned for enterprise and employment, industrial or education and which are related to an existing development primarily to serve the energy needs of the applicant. Such applications will need to demonstrate that they will not detract from the amenity value of nearby residential areas and will be subject, where necessary to the provisions of Article 6 of the Habitats Directive.....Such applications will also be subject to normal planning criteria. Domestic scale renewable energy proposals will be encouraged where appropriate.

5.3. Energy White Paper – Transition to a Low Carbon Future 2015-2030

5.3.1. The Energy White Paper comprises a complete update on national energy policy. It sets out a range of actions that the Government intends to take. The vision is to achieve low carbon energy, whereby Green House Gas (GHG) emissions from the energy sector would be reduced by 80-95% compared to 1990 levels and that GHG *would fall to zero or below by 2100. However, it does not supersede the NREAP* (National Renewable Energy Action Plan), which set out Ireland’s approach to achieving its (legally binding) targets, with a target of 40% of electricity consumption to be from renewable sources by 2020.

5.3.2. Paragraph 137 of the White Paper states:

“The deployment of solar in Ireland has the potential to increase energy security, contribute to our renewable energy targets, and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options, including solar thermal for heat and solar PV for electricity.....[and] is one of the technologies being considered in the context of the new support scheme for renewable electricity generation which will be available in 2016.”

5.4. Natural Heritage Designations

Lower River Shannon SAC (002165) and River Shannon and River Fergus Estuaries SPA (004077) lie approx. 1.5km to north.

6.0 The Appeal

6.1. Grounds of Appeal

This is a first-party appeal. The main points raised may be summarised as follows:

- **Background** - The house was in need of significant repair and refurbishment works when she purchased it. The works undertaken have been of a high quality which have prioritised sustainable development. This has included increasing the energy rating, light capture and the passive energy gain by installing underfloor heating, insulation and replacing windows and doors. The PV panels are part of the overall project. The appellant cares deeply about the environment and the world that her children will inhabit. She has consistently worked towards creating a zero-waste home and towards self-sufficiency.
- **Compliance with policy** - The installation of 21 panels complies with the values espoused by the Council including pursuing the goal of a low carbon economy; renewable energy; using the best available technology to achieve energy savings; and the use of ecologically friendly building materials. It is also consistent with the Minister for Energy's announcement of Government support for a pilot scheme for residential PV at the All Ireland Energy Summit 2018. It was stated that this would be the first phase in a multi-phased implementation of supports for micro-generation in Ireland.
- **Need for permission** - The installation of 21 panels would power her home and completely eliminate the need for fossil fuels. However, she is entitled to erect 7 panels without the need for planning permission. Initially, she had understood that the installation of the panels would not require permission, but was subsequently informed that as they covered more than 12sq.m, permission would be required. Two applications for retention have since been submitted. This process required that many of the panels be taken down, re-erected and taken down again. This has led to friction with neighbours.
- **Visual impact** - The materials used for the panel support structure as well as the panels themselves are standard construction and of the highest quality. They were installed by an electrical engineer and connected to the grid by a certified electrician. Two photographs have been submitted, one showing 21

PV panels and the other with 7 PV panels. The Board is requested to adjudicate on the visual impact of each. The panels are virtually the same colour as the roof tiles and do not block any light or intrude on any neighbours' views.

- **Precedent of a refusal** - The refusal of permission for PV panels sets a dangerous precedent for the sustainable development of the country. The micro-generation of electricity is vital if Ireland is to meet its climate change goals. The refusal contradicts the Council's own Development Plan Objective EH O24.

6.2. Planning Authority Response

The P.A. has not responded to the grounds of appeal.

6.3. First party response to grounds of appeal

The first party has not responded to the grounds of appeal.

6.4. Third party observations on the grounds of appeal

- 6.4.1. Five observations have been received, which are in support of the appellant's case. Several observers sought an oral hearing. The Board considered this request on 1st November 2018. It was decided not to hold an oral hearing. The observations have been received from the following individuals/groups:

An Taisce

Eamon Ryan T.D.

Community Power

Friends of the Irish Environment

Friends of the Earth

- 6.4.2. The points made in these observations may be summarised as follows:

1. **Failure to have regard to more than one CDP policy** - P.A. decision was based on one policy, but did not have regard to IN056 (CDP) or IN11 (South Environs Local Area Plan), which promote a positive approach to renewable energy, having regard to certain criteria. It is considered that the proposed development complies with these criteria. Policy IN11 relates to renewable

energy which is broader than just wind energy, as the scoping of LAPs means that the wording of the Castletroy LAP can be relied on, which supports domestic scale solar schemes. Objective EH024 of the CDP supports the creation of a renewable energy strategy for all of the renewable technologies.

2. **Failure to have regard to Ministerial Guidelines and National Policy** – Section 34(2)(a) of the P&D Act 2000 as amended requires P.A.s to have regard to such guidelines, which seek to reduce Greenhouse Gas Emissions by 80% by 2050. Domestic sector is the third largest emitter of GHGs in the non-ETS sector. Ireland’s transition to a low carbon energy future requires a shift away from reliance on fossil fuels. Objectives 54 and 55 of the National Planning Framework seek to reduce the carbon footprint by integrating climate action into the planning system and to promote renewable energy use and generation at suitable locations to meet national objectives. The White Paper ‘Ireland’s Transition to a Low Carbon Energy Future 2015-2030 also encourages increased energy efficiency in the domestic sector including retrofitting the existing building stock and micro-generation solutions.
3. **Planning precedent** – the refusal of permission would set an undesirable precedent, which would discourage citizens from seeking to undertake similar projects, particularly in view of Government initiatives to encourage such projects. For example, Minister Naughton commenced a grant programme to support solar PV development, which includes the installation of Solar PV panels on residential properties. The creation of a negative precedent by the grant of permission is not accepted as there is no justification for the “serious visual intrusion” or the statement that it would “detract from the general character”. If this argument is accepted, the widespread installation of such panels would be prevented rather than encouraged, which is what is needed.
4. **Impact on visual and residential amenities** – it is asserted that modern PV panels do not give rise to glint or glare such as to cause a nuisance as they are designed to absorb most of the light, and to reflect as little as 2% of sunlight. The installation of solar panels as an exempted development is already accepted by planning legislation, which implies that it does not seriously threaten the residential amenities of neighbours. Surely the installation of 21 panels supports the residential function of an area, which is

in accordance with part (b) of Objective ZD1 of the CDP for Established Residential areas..... “Accommodate a range of other uses that support the overall residential function of an area”.

5. **Community and citizen participation** – there is strong community support for the encouragement of citizen participation in the generation of renewable energy and for communities to benefit from the production of power locally. This belief is shared by the EU Commission and by the Irish Government in terms of the introduction of new rights of European citizens to become active players in the production, consumption and sale of renewable energy, (EU Directive on Renewable Energy). The refusal of permission in this case poses a significant risk to citizen led renewable energy.
6. **Photo Voltaic Panels differ from solar thermal panels** – the planning system provides for a presumption in favour of solar arrays in terms of the Exempted Development rights of up to 12m² or 50% of the roof area, granted in 2007. This related to solar thermal panels which are used to heat water. However, these panels are significantly different in size, weight and appearance to the modern PV panels which produce electricity. These are lightweight, smooth, flat and can be installed quickly and easily. They should be sized to meet the energy demands of the property rather than a percentage of the roof.
7. **Limerick as winners of the Lighthouse Smart City award** – the P.A. should be supporting renewable energy projects such as this as it is in line with the Smart City project. This proposes to facilitate Limerick City citizens to generate more renewable energy than they consume and to share the renewable power directly with the city through a ‘community grid’.

7.0 Assessment

It is considered that the main issues arising from the appeal are as follows:-

- Compliance with national and local policy objectives
- Impact on visual and residential amenity
- Precedent

7.1. Compliance with policy

- 7.1.1.** The development of Renewable Energy schemes is supported by a range of national, regional and local policies. Under the 2009 EU Renewable Energy Directive, Ireland is committed to producing from renewable sources 16% of all energy consumed by 2020 from renewable sources, which will be partially met by 40% of all electricity being generated from renewable sources. In terms of Energy Efficiency, there is a Government target to achieve a 20% improvement in energy efficiency by 2020. The National Planning Framework also includes objectives to reduce the carbon footprint of the country and to promote renewable energy schemes as one of the measures to achieve this. These national policies are generally consistent with and have informed local policies contained in both the Limerick County Development Plan and the South Environs LAP. The most relevant policies are IN056 (CDP) and IN11 (LAP), which are referenced in 5.1, 5.2 above. In general, these policies state that a positive attitude or favourable approach will be taken towards renewable energy schemes provided that they are environmentally sustainable and are in accordance with the proper planning and sustainable development of the area.
- 7.1.2.** Obj. IN056 requires that consideration of such projects must have regard to matters such as environmental and sustainable impacts, impact on the landscape and where impacts are inevitable, mitigation measures. 'Landscape' in this context is taken to include townscape and visual amenity in general. Obj. IN11 relates principally to wind energy developments in industrial, enterprise/employment and education zones, although domestic scale R.E. projects are encouraged where appropriate. However, IN11 also requires that consideration of such projects must demonstrate that it would not detract from the amenity values of nearby residential areas. Section 10.13 (CDP) also states that cumulative effects should be taken into account.
- 7.1.3.** The site is located within a 1960s housing estate, which is zoned Established Residential (LAP). Section 10.5.7 (CDP) requires development to be of a high-quality design and to integrate with the established built form. Policy HOU P3 seeks the establishment of high quality living environments in the interest of quality of life and sustainable communities. Obj. ZD1 (LAP) requires development to be compatible

with adjoining uses, to protect the amenities of existing residential areas and to encourage a high standard of design.

7.1.4. Thus, whilst renewable energy schemes are strongly supported by the policy framework and it is accepted that there is an imperative to seek to reduce reliance on fossil fuels, each individual project must be considered in the context of the proper planning and sustainable development of the area. In other words, the need to encourage, promote and facilitate renewable energy schemes must be balanced against the need to protect residential amenity. Thus, the protection of the residential and visual amenities of an established housing area such as Gouldavoher Estate, as provided for in Zoning Objective ZD1, forms a central plank of such an assessment. It is therefore considered that provided that the proposed development does not detract from the visual and residential amenities of the area, the introduction of PV panels on the roof slope, (over and above the threshold for exempted development), would be acceptable in principle.

7.2. Residential Amenity

7.2.1. The installation or erection of a solar panel(s) on or within the curtilage of a domestic house, or any buildings within the curtilage of the house, is exempted development under Class 2(c) of Part 1, Schedule 2 of the Planning & Development Regulations, 2001 (as amended). This exemption is subject to certain conditions and limitations, one of which is that the total aperture area shall not exceed 12sq.m or 50% of the roof area, whichever is the lesser. The other conditions/limitations relate to the placement/positioning of the panels within the roof space relative to the plane of the roof/walls of the house and to free-standing solar arrays. It is considered that the implication of this exemption is that within these limits, it is anticipated that such a project would generally be in accordance with the proper planning and sustainable development of the area. Any exceedance would need to be assessed in terms of the likely impacts on the amenities of the area.

7.2.2. The appellant is seeking permission for 21 no. panels, whereas it has been established that 7 no. panels would meet the conditions/limitations of the exempted development. It is submitted in the grounds of appeal that the 21 no. panels are required by the appellant in order to provide sufficient electric power to eliminate the need for fossil fuels. However, it is also stated that the panels were installed by an

electrical engineer and connected to the grid by a certified electrician. It should be noted that 14 of the 21 no. panels have been removed following enforcement action. However, the appellant is still seeking permission for 21 no. panels.

- 7.2.3.** Other than the statement by the appellant that 21 panels are required to be self-sufficient, which is not corroborated by any evidence, there is no justification for the need for this number of PV panels. No information is provided regarding the amount of electricity required to power the house and/or the amount of electricity that would be generated, and whether any of this would be exported to the grid. Nor is there any information on any alternatives considered such as the feasibility of placing some of the panels on the rear roof slope or on an outbuilding, or use of free-standing arrays instead of/in conjunction with the roof panels. There is no evidence that the proposed development would not give rise to detriment to residential amenity by reason of glint and glare. No mitigation measures are proposed to address this or the visual impact of covering most of the roof with PV panels, and the cumulative effect of the proposal has not been considered.
- 7.2.4.** The site consists of a semi-detached house within a housing estate of very similar houses, whose character is largely defined by the uniformity of the design, architectural style and use of materials. It is considered that the proposed development, by reason of the scale and extent of the panels relative to the remaining roof slope, and to its position on the front roof slope, would be visually obtrusive and would alter the character of the dwelling house, which in turn would affect the townscape of this part of the street. It is considered that the cumulative effect of additional roof slopes being covered by PV panels in the vicinity of the site would be likely to further alter the character of this part of the street/estate and result in visual disharmony and clutter. It is considered that the proposed development would, therefore, seriously injure the visual amenities of the area.
- 7.2.5.** Glint and glare from reflected surfaces is a recognised issue in relation to solar farms and photovoltaic panels. Glare is described as reflected diffuse light, which is not a direct reflection of the sun, but a reflection of the bright sky around the sun. Glint is defined as either specular (concentrated) reflection or diffuse reflection of sunlight and is the principal element of nuisance. It is pointed out in the third-party observations that solar panels are designed to absorb light in order to convert it to useful energy, rather than reflect it, as reflected light is wasted. It is accepted that for

glint and glare to occur, the sun must be shining. Most reflections are skyward due to the angle of orientation, with reflections to the east in the evening and to the west in the morning, when the sun is low in the sky, and are generally confined to the months of March to September.

- 7.2.6.** The proposed dwelling is located within a row of houses on a NW-SE axis and faces a further row of houses opposite. The distance between the proposed panels and the front elevation of the houses opposite is estimated to be c.20 metres (at most), and the view is uninterrupted. In this scenario, it is considered that the likelihood of nuisance from glint and glare from such a large array of panels, cannot be ruled out. It is considered, therefore, that the proposed development would not be in accordance with HOU P3 of the CDP or of Objective ZD1 of the LAP in that it would fail to encourage a high-quality living environment and to protect the amenities of existing residential areas.

7.3. Precedent

- 7.3.1.** It is noted that the Planning Authority, the first party appellant and the third-party observers have each expressed concern regarding the precedent that would be set by either a grant or a refusal of permission in this case. Those in favour of a grant fear that other citizens would be discouraged from applying for permission for PV panels that would power their homes, and would therefore undermine the efforts of the Government and others who are trying to promote renewable energy micro-generation projects and greater participation by citizens in the electricity market. Those in favour of rejecting the proposal are equally concerned that a grant of permission would lead to similar developments in established residential areas which would be detrimental to the amenities of these areas.
- 7.3.2.** It is considered that each case should be assessed on its merits and in accordance with the policies that are in place at the time. In this particular case, it has been pointed out that there is insufficient evidence to justify the need for such a large-scale development at this location, or for the siting of the entire array of panels on the front roof slope, which would result in serious injury to the visual and residential amenities of the area, and would be contrary to the policy objectives for this established area. Thus, it is considered that a refusal of permission on the basis of

the characteristics of the location, the nature and extent of the development would not create an undesirable precedent as it would be contrary to established policy.

7.3.3. However, the location of the site, comprising one half of a pair of semi-detached houses within an estate of similar houses with little in the way of mitigating landscaping, is also a determining factor in this case. It is considered that a grant of permission in these circumstances could result in further such applications for similar development, the cumulative effect of which is likely to result in adverse impact on the residential and visual amenities of the area.

7.4. Environmental Impact Assessment

Having regard to the nature, size and location of the proposed development, there is no real likelihood of significant effects on the environment arising from the proposed development. The need for environmental impact assessment can, therefore, be excluded at preliminary examination and a screening determination is not required.

7.5. Appropriate Assessment

Lower River Shannon SAC (002165) and River Shannon and River Fergus Estuaries SPA (004077) lie approx. 1.5km to the north. There are no known hydrological links to the protected sites. Given the scale and nature of the development, the distances involved, that the site is located in an established urban area, on serviced lands, it is considered that no appropriate assessment issues are likely to arise.

8.0 Recommendation

8.1 It is recommended that permission be refused for the reasons and considerations set out below.

9.0 Reasons and Considerations

1. Having regard to the policies and objectives as set out in the Limerick County Development Plan 2010-2016 (as extended), and in the South Environs Local Area Plan 2011-2017 (as extended), to the scale, nature and extent of the proposed development which would cover the majority of the

front roof slope of a semi-detached house with photo voltaic panels and to the nature and character of the established residential estate, it is considered that the proposed development would be visually obtrusive and the Board is not satisfied on the basis of the submissions made with the application and appeal, that the proposed development would not give rise to nuisance from glint and glare. The proposed development would, therefore, be contrary to policy objective ZD1 Established Residential of the South Environs Local Area Plan to protect the amenity of existing occupiers, would seriously injure the visual and residential amenities of the property in the vicinity, and would be contrary to the proper planning and sustainable development of the area.

2. Having regard to the nature of the site comprising a semi-detached house set within a suburban housing estate of similar such houses, which are characterised by a uniformity of design, architectural style and materials, it is considered that the proposed development, if permitted, would establish an undesirable precedent which could lead to further similar applications, the cumulative effect of which would seriously injure the visual and residential amenities of the area. The proposed development would, therefore be contrary to the proper planning and sustainable development of the area.

Mary Kennelly
Senior Planning Inspector

25th February 2019