

Planning Statement

Land at Rosedew Farm, Llantwit Major

February 2015

Summary

Proposal:

Construction of a ground-mounted solar PV generation project and associated works

Location

Land at Rosedew Farm, Llantwit Major

Date:

February 2015

Project Reference:

14.284

Client:

DR & EG Davies Ltd

Product of:

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Content

Section 1

Introduction

Section 2

Site Location and Description

Section 3

Planning History

Section 4

Description of the Proposed Development

Section 5

Relevant Planning Policy Framework

Section 6

Supporting Documents

Section 7

Appraisal

Section 8

Conclusion

Introduction

- 1.1 This planning statement is submitted in support of a full planning application for the construction of a ground-mounted solar photovoltaic (PV) generation project and associated works on land at Rosedew Farm, Llantwit Major.
- 1.2 The planning application is accompanied by the following plans:

Drawing Title	Prepared by	Drawing No.
Site Location Plan	<i>Asbri Planning</i>	N/A
Proposed Site Plan	<i>GeoGen Ltd</i>	GEOPV114-6
Panel Cross Section Details	<i>PUK-Solar</i>	SK14-7458.04 a
Inverter House External Dimensions	<i>GeoGen Ltd</i>	GEOPV114-7
Inverter House Internal Dimensions	<i>GeoGen Ltd</i>	GEOPV114-8
RMU & Metering Unit Details	<i>SP Energy Networks</i>	SP4049060
Detailed Landscape Mitigation Proposals	<i>Tirlun Design Associates</i>	TDA.2106.01

- 1.3 The following documents are submitted in support of the application:

Document Title	Prepared by
Design & Access Statement	<i>Asbri Planning Ltd</i>
Archaeology Desktop Assessment	<i>Archaeology Wales</i>
Glint & Glare Assessment	<i>AARDVaRC Ltd</i>
Preliminary Ecological Appraisal	<i>Wydean Ecology Ltd</i>
Environmental Statement (Non-Technical Summary, Main Report and Appendices)	<i>Asbri Planning Ltd</i>

- 1.4 The purpose of this Planning Statement is to provide additional and complementary information to that contained within the accompanying planning application documents. This Statement outlines the context of the application site and the details of the scheme, reviews the planning policy context relevant to the site, presents an appraisal of the development and draws together the key

points and conclusions from the supporting technical documents to demonstrate the overall appropriateness of the proposal.

Site Context

- 2.1 The application site (hereafter referred to as 'the site') is centred on OS Grid Reference SS 97744 67637, on land at Rosedew Farm, to the south of Llantwit Major, and the south-west of Boverton. The coast is approximately 500 metres to the south of the site.
- 2.2 The site extends over an area of 10.7 ha and comprises of the northern parts of two agricultural fields, belonging to the wider agricultural unit associated with Rosedew Farm. It is generally open and lies on an area of relatively flat land. If anything, there is a gradual increase in levels towards the coast.
- 2.3 Being agricultural fields, the site does not encompass any buildings and it is used solely for agricultural purposes. There are no structures situated within the application site.
- 2.4 The site boundaries are currently demarcated by a mixture of hedgerows, fences and traditional clawdd walls (banks). However, the extreme southern boundary of the site is open, save for low-level agricultural fencing. There is also an agricultural track which runs along the north of the site and along the western boundary, providing field access.
- 2.5 There are no public rights of way within the site or immediately adjacent. The Wales Coastal Path (otherwise known as the Heritage Coastal Path) is located approximately 500 metres to the south. A public right of way is found approximately 520 metres to the west which connects to the Wales Coastal Path.
- 2.6 There are no records of historic flooding on the site and flood zone maps indicate that watercourses in the vicinity have floodplains of limited extent that do not encroach onto any part of the application site. The flood risk across the application site is considered to be negligible.
- 2.7 There are no designated heritage assets such as Scheduled Ancient Monuments, Conservation Areas, Listed Buildings, Registered Park and Gardens or Registered Battlefields within the application site.

Planning History

3.1 The following applications hold most relevant to the current proposal.

14/01004 – Formal Environmental Impact Screening Opinion for the construction of a ground-mounted solar PV generation project (the subject of the current application). The outcome of this indicated that an Environmental Impact Assessment would be required.

13/00574 – Planning application for an agricultural building for additional grain storage, located immediately to the east of the site. Approved subject to conditions.

Description of Proposed Development

Introduction

- 4.1 The primary proposal is for the erection of solar PV panels, to provide a total output of up to 5MW. It is estimated that the amount of electricity generated will be sufficient to power approximately 4000 homes.
- 4.2 The solar farm will be formed of photovoltaic (PV) panels grouped together in frames set out in rows of modules angled at 25 degrees. The PV panels will be ground mounted using steel piles set into the ground. The structures are not expected to exceed 2.1m in height with no foundations required.
- 4.3 Due to the need to maximise solar exposure, the panels will be orientated in a southern direction and tilted accordingly. The intention is to site the installations such that the highest point of the tilted panels is less than 1m i.e. below the normal height of existing field boundary planting and hedges. Furthermore, it is proposed to use the latest anti-reflective panels, which in addition to being more efficient will further reduce the visible impact of panel installations.
- 4.4 To ensure that the solar farm can operate at its optimum efficiency, the solar panel arrays will be located away from any existing hedgerows or trees. This in turn will mitigate against overshadowing.
- 4.5 Deployment will require the installation of a number of inverter cabinets, a power transformer cabin and a small sub-station structure, in order to convert the generated electricity from DC to AC and allow connection to the electricity distribution network. Connection to the National Grid will be taken from the perimeter of the site boundary and undertaken by Statutory Undertakers under their permitted rights.
- 4.6 Asbri Transport has advised the development team on the most appropriate access to the site. This is to be achieved via an existing farm access track that connects the main body of the site to the existing road network to the north west.
- 4.7 Due to the nature of solar PV installation, once installed, there will be minimal on-site activity. The applicant anticipates planned visits to the site once every 3 months for maintenance activities and this will be undertaken by a standard road-going vehicle. Within the perimeter of the solar site, the separation distance between rows of panels will avoid the need for the demarcation of formal access tracks.

- 4.8 Site security is a legal requirement for the grid electricity equipment, and the applicant is aware that the visual impact of security measures can sometimes cause concern. Security is required to protect the grid electricity equipment from animal and human interference and therefore it may be necessary for the electrical control equipment and transformer housing to be protected by additional fencing enclosures. The detailed specification of this fencing will be confirmed at a later date. The sub-station and inverter housing will be located within the site benefiting from existing natural screening which, in turn, can be reinforced as necessary. Details of the substation structures will be agreed with the network operator following the granting of planning consent and it is therefore respectfully requested that these form the basis of an appropriately worded planning condition and that the information provided is treated as indicative.
- 4.9 There will also be a perimeter fence for the whole scheme which is expected to be 2m high agricultural style fencing supported on timber stakes (subject to insurer requirements).
- 4.10 In order to facilitate existing hedgerow and boundary fence maintenance, along with human passage space, an internal clearance of 5m from the solar arrays to the boundary fence/hedgerow will seek to be established. This will permit a corridor for wildlife and humans to traverse around the installation; which is in fact an ecological gain given the agricultural use of the land. In addition, the panels will be raised off the ground to allow the land to be grazed by sheep, thus retaining agricultural productivity and keeping the grass down.
- 4.11 The proposal would have an operational lifespan of twenty five years. Upon reaching its twenty-fifth year, the proposal would enter its decommissioning phase, whereby all equipment would be dismantled and removed from the site. All traces of the panels and security fencing would be removed during this phase and scrapped/recycled accordingly. All waste materials would be transported to appropriate, licenced disposal facilities.
- 4.12 A formal request has been issued to the Vale of Glamorgan Council for a Screening Opinion under the Environmental Impact Assessment Regulations. In their response dated 23rd September 2014, it was considered that the potential impacts of the development upon the environment are likely to be significant. As such, the Local Planning Authority concluded that an Environmental Impact Assessment is required.

Relevant Planning Policy Framework

Background

- 6.1 The planning policy framework for the determination of this application is provided by International/national renewable energy policy, national planning guidance in the form of Planning Policy Wales, together with the Adopted Vale of Glamorgan Unitary Development Plan.
- 6.2 The context of renewable energy policy is set by international agreements on climate change to reduce greenhouse gas emissions, principally the Kyoto Protocol. Within the UK, details of targets to meet the Kyoto Protocol are contained within the Climate Change Programme (DETR, 2000), which resulted in various reviews, white papers and culminating in Acts of Parliament.
- 6.3 National Planning Policy is contained within the Wales Spatial Plan, which provides an overall strategic framework, together with Planning Policy Wales (Edition 7, July 2014). Planning Policy Wales (PPW) is in turn supplemented by 22 Technical Advice Notes (TAN's).
- 6.4 The development plan is the Vale of Glamorgan Unitary Development Plan 1996-2011 (adopted April 2005). Whilst this UDP is now time expired, in the absence of an adopted Local Development Plan it is still considered to be development plan for development control decisions.

International, European and UK Context

- 6.5 The Kyoto Protocol was agreed in 1997 at the United Nations framework Convention on Climate Change. In signing up to the protocol, the European Union and its members agreed to an 8% reduction in greenhouse gas emissions below 1990 levels by 2012. Within the European Union, the UK Government agreed to a legally binding 12.5% reduction in greenhouse gases and also to set a domestic goal of reducing carbon dioxide emissions by 20% of 1990 levels by 2010.
- 6.6 The United Kingdom Climate Change Programme (DETR, 2000) details the moves to be adopted so as to meet these targets. Measures include the climate change levy, a renewable energy obligation for energy suppliers (10% of electricity supply should be by renewable sources by 2010) and improving energy efficiency requirements of Building Regulations. An updated document was published by DEFRA and the devolved administrations in 2006 which, whilst reinforcing the commitment, included the following targets:-
 - **Reduction of carbon dioxide emissions by 20% below 1990 levels by 2010**
 - **Reduction of carbon dioxide emissions by 60% by about 2050.**

- 6.7 In March 2007, the European Union announced a legally-binding obligation on the Union to generate 20% of its electricity by renewable means by 2020. This was followed by the UK Government's consultation on a draft Climate Change Bill which aimed to introduce a framework for the UK to achieve its goals of reducing carbon dioxide emissions and ensure steps are taken towards adapting to the impacts of climate change.
- 6.8 The Climate Change Act became law on 26 November 2008. One of the key provisions of the Act is the introduction of legally binding targets on greenhouse gas emissions comprising reductions through action in the UK and abroad of at least 80% by 2050, and reductions in CO2 emissions of at least 26% by 2020, against a 1990 baseline. The generation of electricity by renewable means such as solar energy can be a key contributor towards meeting these targets.
- 6.9 The Energy White Paper 'Meeting the Energy Challenge' was published in May 2007. This identified the two long-term energy challenges facing the nation as being *'tackling climate change by reducing carbon dioxide emissions both within the UK and abroad; and ensuring secure clean and affordable energy as we become increasingly dependent on imported fuel'*. An Energy Bill followed in January 2008 as the Energy Act.
- 6.10 The Climate Change Act 2008 sets the Welsh Government's long-term goal for Wales of 60% reduction in carbon dioxide emissions by 2050. A key policy in achieving this is increased renewable energy. Importantly, the Renewable Energy report of the Welsh Government's Economic Development Committee stated in January 2003 that electricity generated from renewable energy sources should rise to 4 Terrawatt hours (TWh) per annum by 2010 and 7 TWh per annum by 2020. At present, the level of electricity generated from renewable sources is approximately only 1.4TWh per annum – considerably less than targets.
- 6.11 The UK has signed up to the EU Renewable Energy Directive which includes a UK target of 10% (2010) rising to 15% (2020) of energy from renewable sources by 2020. The policy aims to encourage further use of renewables to produce energy, which will help to meet Government targets for generating power from renewable sources.

National Planning Policy

- 6.12 The Wales Spatial Plan, entitled 'People, Places, Futures', sets a strategic framework to guide future development and policy interventions. It integrates the spatial aspects of national strategies for social inclusion and economic development, health, transport and environment, translating the Welsh Government's sustainable development duty into practice.
- 6.13 The plan includes an objective which seeks to reduce annual greenhouse gas emissions, highlights the implications of climate change and promotes a low-carbon economy.

- 6.14 **Planning Policy Wales (Edition 7, July 2014)** is the Welsh Government's principal planning policy document and it sets out the context for sustainable land use planning policy, within which local planning authorities' statutory development plans are prepared and development control decisions on individual applications and appeals are taken.
- 6.15 The main thrust of PPW is to promote sustainable development by ensuring that the planning system provided for an adequate and continuous supply of land available and suitable for development to meet society's needs in a way that is consistent with overall sustainability principles. The newly revised document emphasises right from the beginning the importance the planning system has to play in delivering sustainable development throughout the country.
- 6.16 The Government's aim is to secure an appropriate mix of energy provision for Wales, whilst minimising the impact upon the environment. This will be achieved in part by strengthening renewable energy production which includes solar and through a greater focus on energy efficiency and conservation. The document also includes specific development control advice requiring local authorities to consider the effects of sustainable energy schemes in relation to sustainable development criteria, particularly with regard to meeting the Welsh Government's renewable energy targets and to minimising potential detrimental environmental effects on local communities.
- 6.17 Under Chapter 4 (Planning for Sustainability), the main objective stated which relates to the installation of PV panels is as follows:-
- 'Supporting the need to tackle the causes of climate change by moving towards a low carbon economy. This includes facilitating development that reduces emissions of greenhouse gases in a sustainable manner, provides for renewable and low carbon energy sources at all scales and facilitates low and zero carbon developments.'***
- 6.18 In terms of determining planning applications for renewable and low carbon energy development (and associated infrastructure), PPW paragraph 12.10.1 advises that local planning authorities should take into account:-
- ***The contribution a proposal will play in meeting identified national, UK and European targets and potential for renewable energy, including the contribution to cutting greenhouse gas emissions;***
 - ***The wider environmental, social and economic benefits and opportunities from renewable and low carbon energy development;***
 - ***The impact on the natural heritage, the coast and the historic environment;***

- ***The need to minimise impacts on local communities to safeguard quality of life for existing and future generations;***
- ***Ways to avoid, mitigate or compensate identified adverse impacts;***
- ***The impacts of climate change on the location, design, build and operation of renewable and low carbon energy development. In doing so, consider whether measures to adapt climate change impacts give rise to additional impacts;***
- ***Grid connection issues where renewable (electricity) energy developments are proposed; and***
- ***The capacity of and effects on the transportation network relating to the construction and operation of the proposal.***

- 6.19 Chapter 12 (Infrastructure and Services) states that it is the aim of the Welsh Government to promote the generation and use of energy from renewable and low carbon energy sources at all scales and promote energy efficiency, especially as a means to secure zero or low carbon developments and to tackle the causes of climate change.
- 6.20 The chapter considers that the planning system has an important part to play in ensuring that the infrastructure on which communities and businesses depend is adequate to accommodate proposed development so as to minimise risk to human health and the environment and prevent pollution at source. This includes minimising the impacts associated with climate change.
- 6.21 It is also stated that the Welsh Government's aim is to secure an appropriate mix of energy provision for Wales, whilst avoiding, and where possible minimising environmental, social and economic impacts. This will be achieved through action on energy efficiency and strengthening renewable energy production. This forms part of the Welsh Government's aim to secure the strongest economic development policies to underpin growth and prosperity in Wales, recognising the importance of clean energy and the efficient use of natural resources, both as an economic driver and a commitment to sustainable development. This is reiterated in the Welsh Government's Energy Policy Statement (2010).
- 6.22 It is intended that local planning authorities should facilitate the development of all forms of renewable and low carbon energy to move towards a low carbon economy to help to tackle the causes of climate change.
- 6.23 Planning Policy Wales, under Paragraph 4.3.1, provides several principles which underpin the national approach to sustainable development, one of which is "***respecting environmental limits, so that resources are not irreversibly depleted or the environment irreversibly damaged.***" This principle is particularly pertinent to the development of solar farms and it

is considered that local planning authorities should take this into account when determining a planning application.

- 6.24 PPW also seeks to protect the 'best and most versatile' agricultural land from development. In this regard, paragraph 4.10.1 states:

"In the case of agricultural land, land of grades 1, 2 and 3a of the Department for Environment, Food and Rural Affairs (DEFRA) Agricultural Land Classification system (ALC)17 is the best and most versatile, and should be conserved as a finite resource for the future. In development plan policies and development management decisions considerable weight should be given to protecting such land from development, because of its special importance. Land in grades 1, 2 and 3a should only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. If land in grades 1, 2 or 3a does need to be developed, and there is a choice between sites of different grades, development should be directed to land of the lowest grade."

- 6.25 **Technical Advice Note 8: Renewable Energy (TAN 8)** was produced in 2005. This TAN focuses on the land use planning considerations of renewable energy. The TAN emphasises that the provision of electricity from renewable sources is an important component of the UK energy policy.

- 6.26 More specifically, paragraph 3.15 specifies that:-

'Other than in circumstances where visual impacts is critically damaging to a listed building, ancient monument or a conservation area vista, proposals for appropriately designed solar thermal and PV systems should be supported.'

- 6.27 **Technical Advice Note 6: Sustainable Rural Communities (TAN 6)** was produced in 2010. It states that it is an important part of moving towards a sustainable rural community is the creation of renewable energy sources. One way in which this can be done is through farm diversification where, for example, it is considered technologies like solar PV can be situated without damaging the agricultural value of the land.

- 6.28 The following additional Technical Advice Note will be referred to in detail elsewhere in the planning submission, and particularly in the accompanying Design and Access Statement:-

- Technical Advice Note 12: Design

Practice Guidance: Planning Implications of Renewable and Low Carbon Energy

- 6.29 In February 2011, the Welsh Government published Practice Guidance: Planning Implications of Renewable and Low Carbon Energy, including solar PV arrays. The Guidance document recognises under paragraph 8.4.16, **“that a significant proportion of proposals for solar PV arrays will be on agricultural land”** and that the use of **“high quality agricultural land”** and the **“reversibility”** of proposals will be considered.

Development Plan Policy

- 6.30 The development plan in the context of this proposed development is the Vale of Glamorgan Unitary Development Plan 1996-2011 (UDP), which was adopted in April 2005.
- 6.31 The site is not located within a defined settlement boundary, the closest of which would be that for Llantwit Major. It is therefore considered to be located in the open countryside. Policy ENV1 - *Development in the Countryside* contains a presumption against new built development in the open countryside, unless justified under national planning policy and/or for the purposes of agriculture, forestry and recreation, or if the development is approved under other policies in the plan. Policy ENV10 – *Conservation of the Countryside* also aims to maintain and improve the countryside.
- 6.32 Policy ENV2 – *Agricultural Land* seeks to protect the most versatile agricultural land (Grades 1, 2 and 3A) from irreversible development. The term ‘irreversible development’ is not defined in the amplification to the policy, although this has been subsequently clarified in the course of relevant planning appeals.
- 6.33 Policy ENV5 – The Glamorgan Heritage Coast seeks to ensure that the environmental qualities of this designation are conserved and enhanced. Priority is to be given to agriculture, landscape and nature conservation. The amplification provided within paragraph 3.4.17 importantly recognises the importance of farm-based diversification proposals as part of the agricultural priority.
- 6.34 Policy EMP7 – *Farm Diversification* states that all new proposals for the diversification of farmsteads will be permitted if:
- i. The diversification proposals are for small scale employment, commercial, recreational or tourism purposes;***
 - ii. Proposals for new structures are specifically designed for and necessary for the purpose of diversification;***
 - iii. Proposals are compatible with the surrounding landscape, adjacent land uses, and any existing related***

structures in terms of their scale, siting, design and external appearance of any new building and extension to new buildings;

- iv. Proposals do not unacceptably affect the interests of agriculture conservation, areas of ecological, landscape, wildlife, historic, or archaeological importance;**
- v. The provisions of car parking, servicing and amenity space are in accordance with the approved guidelines;**
- vi. Vehicular access is available or can be provided from the public right of way without any unacceptable effects upon the appearance of the countryside;**
- vii. Proposals do not have an unacceptable affect upon the amenity and character of the local environmental, in terms of noise, smell, traffic congestion or visual intrusion.**

6.35 Policy COMM8 – *Other Renewable Energy Schemes* provides support for renewable energy schemes providing the following criteria are met:

- 1. The proposal has no unacceptable effect on the immediate and surrounding countryside;**
- 2. The proposal has no unacceptable effect upon the sites of conservation, archaeological, historical, ecological and wildlife importance;**
- 3. Adequate measures are being taken, both during and after construction, to minimise the impact of development upon local land use and residential amenity.'**

6.36 Policy ENV27 – *Design of New Developments* requires that new development is of a good standard of design and respects the qualities of the surrounding context.

6.37 Other relevant policies from the UDP are listed below:-

- Policy ENV16 – Protected Species
- Policy ENV18 – Archaeological Field Evaluation

Supporting Documentation

- 7.1 The following sub-sections summarise the findings of the technical documentation submitted in support of the planning application:

Design & Access Statement

- 7.2 A comprehensive Design & Access Statement has been prepared by Asbri Planning Ltd demonstrating how the scheme is a well-considered proposal and is sympathetic to its wider setting and context, particularly as the site is generally flat and has a high degree of visual containment to the north and to the west.
- 7.3 The Statement concludes that the design and layout of the proposed solar farm is acceptable to the wider countryside setting providing that sufficient mitigation measures are in place. Furthermore the development will not prejudice the overall landscape qualities, particularly in the context of sensitive receptors.

Ecological Assessment Work

- 7.4 As part of the Environmental Impact Assessment, Wydean Ecology have been commissioned to undertake an assessment of the ecological resource. This features in detail as part of the accompanying Environmental Statement.
- 7.5 To inform the relevant chapter of the Environmental Statement, a Preliminary Ecological Appraisal has been prepared. The survey and report have been designed as follows:-
- A desk study to identify, collate, analyse, and interpret historical biological records, and other ecological reference material pertaining to the site;
 - A field survey to collect new biological and ecological data from the site;
 - To identify what, if any, additional ecological surveys or assessments may be required; and
 - To use all the above data, as appropriate, to determine the positive and/or negative impacts on biodiversity which will accrue as a result of the proposed development, and to determine the significance of those impacts on the habitats and species present on the site.
- 7.6 The desk study considered a circular area within a 2km radius, centred on the approximate centroid of the proposed development site. The field survey examined the area within the confines of the site boundary but also considered habitats immediately adjacent to that boundary, at least up to 50m beyond it. In addition, all ponds and other water bodies which could be

identified within 500m of the proposed development were, where access could be obtained, evaluated for the likely presence of Great Crested Newt.

- 7.7 The site has no statutory designations. There are no internationally or nationally protected sites, such as SPA, SAC or Ramsar sites within 10km of the proposed development site. There are no Sites of Special Scientific Interest within the 2km search boundary. The site has no non-statutory designations and there are no Local Nature Reserves within 2km of the site. Three Sites of Importance for Nature Conservation (SINCs) are located within 2km of the proposed development site.
- 7.8 No historic species records have been recorded for the site, although records exist within 400m of the site boundaries which indicate that the following may be of relevance to the site:-
- Bats;
 - Badger;
 - Great Crested Newt;
 - Reptiles;
 - Invertebrates; and
 - Breeding Birds
- 7.9 The site visit observed the site as part of two larger arable fields, which extend to the south and beyond the perimeter of the development site. Both fields, outwith the proposed development site were planted with Winter Wheat, following on from Oilseed Rape, some seedlings of which were visible within the crop. These areas, with the exception of the very narrow margins, appeared to have been subject to herbicidal controls, with arable weeds largely absent. No signs of Badger or any other protected species were noted in these fields, or their associated hedgerows.
- 7.10 There are no features on site suitable for use by roosting bats. Three trees were observed in hedgerows, although these trees are outside of the site boundaries in all cases. Despite no Dormouse being found during the habitat survey, these hedgerows are considered to have some potential to support this species and this potential could be considerably enhanced by implementing appropriate hedgerow management prescriptions.
- 7.11 No badger setts or other evidence (e.g. paths, foraging signs, latrine pits, hairs, etc.) were found during the survey. Badgers are therefore not considered to be material to the development proposals, and therefore this species is not considered further. The same conclusion is reached in respect of reptiles with all hedges and their associated banks to be retained and the existing access points used.

- 7.12 A Habitat Suitability Index (HSI) was undertaken of the only static water body found within 500m of the site boundary. The results suggest that this pond is unlikely to support Great Crested Newt, in particular because of the large Koi Carp present. The pond is nearly 300m distant from the development site boundary, and only the hedgerows and their associated banks have any potential to support this species during the terrestrial phase of their life-cycles. It is therefore concluded that no further survey work for this species is required.
- 7.13 The hedges and associated hedge-banks do have some potential to support a range of invertebrate species, but this is likely to be reduced due to the limited range of botanical species present, and the likelihood of insecticidal spray drift from agricultural operations. Because of this, it is considered unlikely that any significant invertebrate populations could be present.
- 7.14 In consultation with the Council Ecologist, Wyedean Ecology were advised that the local area is noted for its important populations of breeding Sky Lark and Lapwing. Rotational crops, including the current grass ley do have some potential to be of use for ground-nesting birds. However, the reproductive success of such species will be significantly influenced by the crop species, the management prescriptions applied, and the timing of agricultural operations, including harvesting. Upon receipt of such information, the Council Ecologist agreed that this reduced the need for further survey work during the optimum season.
- 7.15 Overall, it is considered that the proposed development will not result in any detrimental impact on habitats or protected species. The incorporation of biodiversity enhancement measures, as suggested by the appraisal will considerably increase site biodiversity and it is advised that these measures are adopted.

Access Appraisal Work

- 7.16 Also as part of the Environmental Impact Assessment, Asbri Transport have been commissioned to undertake an access appraisal in order to inform their assessment of the Traffic, Transport and Movement resource.
- 7.17 It has been advised that the access to the solar development should be via an existing field access to the southern end of Ham Manor Park, which itself is reached via Mill Lay Lane. From the access, the site will be reached via a 300m long existing track that skirts the southern boundary of Acorn Camping and Caravan Park. It has been demonstrated that this access can accommodate the largest vehicles expected to access the site.
- 7.18 Mill Lay Lane, Ham Lane East and the route to the B4265 via Boverton Road and Le Pouliguen Way are able to accommodate

HGV's and this has been demonstrated by a vehicle swept path analysis.

- 7.19 The proposals require deliveries by 16.5m articulated vehicles, 10m rigid vehicles as well as a mobile crane arriving on-site. It is anticipated that approximately 70 trips (two way) will be generated by the proposals during an intensive two week phase of the construction, equating to approximately seven trips per day.
- 7.20 In order to minimise any transport impacts on the public highway of the construction and delivery vehicles, the following mitigation measures, which will be set out in a Construction Traffic Management Plan, are proposed:-
- Implementation of a construction routeing strategy to ensure all construction and delivery vehicles use the most appropriate route;
 - A site delivery system will be in operation, including restricted delivery times to avoid school opening and closing times;
 - Installation of wheel washing facilities at the site access; and
 - Introduction of temporary traffic management signage for the duration of the construction works.
- 7.21 Once operational, there will be no staff based permanently on site. Visits for maintenance, cleaning and monitoring are likely to be infrequent, approximately four times a year.
- 7.22 Overall, it is concluded that with the introduction of the proposed mitigation measures, the impacts will be reduced during the construction phase and mitigation measures are unnecessary for the operational phase. No major adverse impacts will remain and it is therefore considered that the proposed development will not represent a significant effect on the environment from a traffic, transport and movement standpoint.

Landscape & Visual Impact Assessment Work

- 7.23 Tirlun Design Associates (TDA) have been appointed to undertake an assessment of the landscape and visual impact resource which has formed part of the Environmental Impact Assessment that has been undertaken. Full details of this assessment features as part of the Environmental Statement that accompanies the planning application.
- 7.24 The landscape and visual impact assessment undertaken considers the likely effects upon the landscape character and features, including effects on the aesthetic values of the landscape, as well as the likely impacts upon visual amenity. This included the effects

upon potential viewers and viewing groups caused by changes in the appearance of the landscape as a result of the development.

- 7.25 The assessment has analysed the landscape character of the proposed development site and its surroundings, using the current published LANDMAP data to inform the assessment of the landscape baseline condition. The methodology of the assessment undertaken, consisted of the selection of 11 viewpoints. These viewpoints ranged from short to long range, including views from publicly accessible areas and views that have a reasonably high potential number of viewers or are of particular importance to the viewers affected, such as public footpaths, public rights of way and roads adjacent to and surrounding the site.
- 7.26 The visual impact of the proposed development from these viewpoints, and its impact upon the landscape character, was then assessed systematically. This assessment was based upon sensitivity, magnitude, and significance, ranging from low-high, considering the short (construction and operational phase) and long term (post-operational phase) effects of the development.
- 7.27 It was concluded that there were no views of the site from 8 of the 11 viewpoints. As a result, the significance of the development's impact upon the majority of viewpoints, in terms of visual impact, was identified as Negligible. There were only distance or partial views of the site from the resulting three viewpoints. There was one particular viewpoint where it was considered that the level of significance was Minor Adverse, which was the viewpoint to the south upon the Wales Coastal Path, north of Stout Bay. However, this was due to the close proximity of the viewpoint to the site, and it was concluded that once the landscape mitigation measures are established (likely to be in the region of 2-3 years), the minor adverse impact the development will be reduced to negligible.
- 7.28 With regards to the magnitude of landscape change, although the character of the site will change, albeit temporarily, the impact upon the surrounding landscape, as demonstrated by the visual amenity appraisal, is localised.
- 7.29 The assessment also concluded that upon implementation of the landscape mitigation measures, the development's visual and landscape character impacts will be negligible and localised, and will be reduced and will continue to be reduced as the mitigation proposals, hedgerows in particular, become more established.

Archaeological Desk-Based Assessment

- 7.30 Pre-application consultation with Glamorgan Gwent Archaeological Trust revealed the need for any application to be supported by an Archaeological Assessment. Archaeology Wales were therefore commissioned to carry out an Archaeological Desk-Based Assessment, including site visit, to determine the archaeological potential of the application site. The assessment involved an appraisal of all the documentary and cartographic sources pertaining to the site, a study of aerial photographs, and a site visit.
- 7.31 The assessment confirms that there are no designated historic landscape areas, Listed Buildings or Scheduled Ancient Monuments within the proposed development area. Such heritage assets are present in the wider study area including 10 Scheduled Ancient Monuments, 49 Grade II Listed Buildings, 6 II* Listed Buildings and 1 Scheduled Ancient Monument. However, it is considered that the proposed development will not adversely affect the heritage significance of these designated assets.
- 7.32 The regional Historic Environment Record lists 122 archaeological sites within the study area, although none are within the development area. The majority of these sites are located within the village of Llantwit Major and relate to the medieval and post-medieval dwellings, religious buildings and agricultural concerns within the area. However, the large number of sites in close proximity to the proposed development area, with particular reference to Roman and prehistoric finds spots, may indicate an increased potential for discoveries during the proposed development.
- 7.33 As such, the report recommends suitable mitigation to safeguard the archaeological resource within the development area, in the forms of an archaeological watching brief during all intrusive groundworks.

Appraisal

8.1 Section 6 identified the relevant planning policies that need to be taken into account in the determination of the planning application. The following section expands on this by appraising the development against the relevant policies and the key issues, which are identified as follows:-

- The **principle of development**, having regard to the need for renewable energy generation;
- The extent of **landscape and visual impact**;
- **Transportation Considerations**;
- **Ecological Impact**;
- **The potential for the loss of the best and most versatile Agricultural Land**; and
- The potential for **Glint and Glare Impact**.

The Principle of Development

8.2 The increase in renewable energy generation is seen to be of paramount importance within the UK in order to reduce overall CO2 emissions by 50% by 2050 and, in doing so, help assist in the mitigation of climate change through the provision of an alternative source to depleting fossil fuels. As outlined within the Government's 2009 Energy White Paper, there is a need to ensure 15% of energy comes from renewable energy sources by 2020. Similar policy at the Wales level (in the form of the Welsh Government's Energy Statement) is also wholly supportive of renewable energy and the achievement of challenging targets. This provides material encouragement for the proposed development.

8.3 The policy support for renewable energy projects is supported by the Wales Spatial Plan, Planning Policy Wales and the accompanying Technical Advice Note 8: Planning for Renewable Energy (TAN 8). The Wales Spatial Plan promotes a low-carbon economy, and this is expected of all the regions identified in the Plan. Planning Policy Wales requires local authorities to consider the effects of sustainable energy schemes in relation to sustainable development criteria, particularly with regard to meeting the Welsh Government's renewable energy targets, so as to minimise detrimental environmental effects on local communities. This is supported by the contents of TAN8 (Planning for Renewable Energy) such that, overall, it is considered that there is a national policy presumption in favour of such renewable energy schemes.

8.4 Of particular relevance is the statement made at paragraph 3.15 of TAN 8, as reiterated below:-

'Other than in circumstances where visual impact is critically damaging to a listed building, ancient monument or a conservation area vista, proposals for appropriately designed solar thermal and PV systems should be supported'

- 8.5 The accompanying Archaeology Desk-Based Assessment affirms that the application site does not contain any such heritage assets, however for completeness; considerations of retention of the open aspect and visual impact are discussed in the following sections. It is concluded that there is explicit in-principle national planning policy support for renewable energy development that contributes to meeting legal obligations and policy objectives to significantly increase energy production from renewable sources.
- 8.6 Regarding the principle of development at the local level, Policy ENV1 of the UDP states that development will be permitted in the countryside if it is justified in the interests of agriculture or forestry; or other development including utilities or infrastructure for which a rural location is essential; or under the terms of another policy of the plan.
- 8.7 In this respect, Policy COMM8 of the adopted UDP specifically relates to such renewable schemes, and is of primary relevance to the assessment of the application. The policy provides support for renewable development providing that a series of technical criteria are adhered to. Such technical matters will be dealt with under the subheadings that follow. Likewise, in respect of the technical criteria listed under the main farm diversification policy (EMP7). It is noteworthy that this diversification policy does not prohibit a development of this nature in principle. Indeed, this is supported by references in TAN6 to renewable energy being an appropriate use for farm diversification.
- 8.8 It is therefore considered that the proposal represents an acceptable form of development in principle, and an acceptable form of farm diversification. It is also clear that rural locations will in most cases be required for solar farms of this scale and also that countryside locations are generally supported in principle in both local and national guidance. These are subject to the impact of the development on a range of detailed considerations being acceptable. Such considerations will be evaluated in relation to the key issues which follow.
- 8.9 In preparing this Statement, regard has been paid to proposals elsewhere in the country, including relevant case law. It can be concluded that the case for renewable energy at national, regional and local level has significant weight and provides the circumstances necessary to justify the development.

Landscape and Visual Impact

- 8.10 Planning Policy Wales makes it clear that renewable energy projects should generally be supported by Local Planning Authorities providing environmental impacts are avoided or minimised, and nationally and internationally designed areas are not compromised.
- 8.11 The importance of renewable energy schemes in Wales, and the need for consistency in dealing with applications for such developments, is indicated in the Welsh Government Practice Guidance 'Planning Implications of renewable and Low Carbon Energy', issued in February 2011. This advice includes guidance in respect of solar arrays, and advises (at paragraph 8.4.9) as follows:-
- “Design landscapes such as National Parks and AONBs are likely to be particularly sensitive in respect of one or more of these types of visual effect. Extreme care therefore needs to be taken to ensure the siting of solar arrays does not affect the special qualities of designated landscapes.”**
- 8.12 Nevertheless. At 19.2.4 it is generally acknowledged that designated areas and in particular protected landscapes have a vital role to play in contributing towards reducing carbon emissions. Moreover, as has been stated by officers in the consideration of other solar developments within the Vale, any such designations should not be interpreted as a 'blanket ban' on development. Instead, there will be an onus on developers to demonstrate that proposals have been designed to minimise the impact of the development on the landscape.
- 8.13 A Landscape and Visual Impact Assessment (LVIA) has been undertaken as part of the Environmental Impact Assessment process. This has analysed the landscape character of the proposed development site and its surroundings, using the current published LANDMAP data to inform the assessment of the landscape baseline condition.
- 8.14 The key conclusions drawn from the assessment in terms of visual impact during the construction and operational phase, is that due to the site's location within a rolling coastal lowland plateau, views of the site are restricted by the surrounding natural topography.
- 8.15 The visual amenity appraisal confirmed that the majority of the views of the site from surrounding areas during the construction and operation of the development, accessible to the general public, are well-screened. As a consequence, it was concluded that the significance of the development's impact upon the majority of viewpoints, is Negligible. It was noted that any available views of

the site, will be mitigated by the plantation and enhancement of hedgerows.

- 8.16 With regard to the impact the proposal would have upon the landscape character during the construction and operational phase, in terms of magnitude, although the character of the site will change, albeit temporarily, the impact upon the surrounding landscape, will be localised. The significance of the development upon the landscape character of the area was assessed at worst as Moderate or Minor. Consequently, the changes will be small, and will only have a minor effect upon the immediate landscape during the construction and operation of the development.
- 8.17 As aforementioned, the assessment also concluded that upon implementation of the landscape mitigation measures, the development's visual and landscape character impacts will further be reduced and will continue to be reduced as the mitigation proposals become more established.
- 8.18 In terms of long-term impact, it was considered that once the solar plant is decommissioned, and through the retention of landscape mitigation measures, the impact of the development upon the landscape character of the area should be considered as minor beneficial.
- 8.19 It is therefore concluded that the proposal would not unacceptably undermine the integrity of the Glamorgan Heritage Coast designation or be so severe that it outweighs the benefits in terms of renewable energy production. In addition, the mitigation measures proposed in terms of new and strengthened hedgerow planting will serve to provide additional landscape and biodiversity benefits in the medium to long term. The proposed development would therefore comply with the aims of Policies ENV5, ENV27, EMP7 and COMM8 of the UDP, and the national guidance within TAN6 and TAN8.

Transportation Considerations

- 8.20 Noting the relatively insignificant nature of traffic movements associated with the operational stage of the development, the appraisal of traffic, transport and movement considerations prepared by Asbri Transport as part of the Environmental Impact Assessment focusses primarily on the construction period.
- 8.21 The assessment has identified the most preferable route for construction traffic and, via a swept path analysis, it has been demonstrated that this route can accommodate the largest vehicles expected to the site.
- 8.22 It is anticipated that the construction stage will generate a total of 70 trips (two-way) by associated vehicles during an intensive two

week phase of the construction. This equates to approximately seven trips per day, which is considered to be acceptable.

- 8.23 It is within the power of the LPA to impose appropriately worded planning conditions to ensure the approval of a Construction Traffic Management Plan and other mitigation measures for the construction stage. Given the scope to impose any such conditions, it is considered that the proposed development is acceptable in terms of highway safety considerations, and is in accordance with policies ENV27 and COMM8 of the UDP.

Ecological Impact

- 8.24 A Preliminary Ecological Appraisal has been undertaken by Wydean Ecology, which has informed the relevant chapter of the submitted Environmental Statement. The assessment work has also fully informed the design process.
- 8.25 It is noted that the development is unlikely to impact significantly on biodiversity interests if due care and attention is paid during construction and the recommendations of this report are followed. Appropriate mitigation can be incorporated so as to ensure that no significant impacts will occur to on site features.
- 8.26 On this basis, and subject to conditions and the implementation of the measures/recommendations contained within the submitted ecological assessment, it is considered that the development would not unacceptably impact upon ecology, in accordance with Policies ENV16, ENV27 and COMM8 of the UDP.

Agricultural Land Grade

- 8.27 National practice guidance recognises that, in view of the national policy support for farm diversification and the relatively large area of land required for solar arrays that a significant proportion of proposals for solar PV arrays will be on agricultural land.
- 8.28 It is critical to note that PPW seeks to protect agricultural land from irreversible damage. Indeed, the 'irreversible' term is also reflected in UDP Policy ENV2.
- 8.29 In the case of this application, the development will be temporary, lasting approximately 25 years before being decommissioned. In addition, the arrays are not embedded in permanent foundations but are simply pile driven into the ground. The ancillary development will be constructed upon a hardstanding/base, however these elements are small in scale and could easily be removed when the development has ceased, as could any access tracks between panels.
- 8.30 As such, the development is temporary in nature and when decommissioned, the land can return to full agricultural use.

Furthermore, the arrays are mounted at a height which allows the land to continue to be used for sheep grazing, which is the current, predominant agricultural use of the land. As such, there will be very little depletion in the agricultural use of the site during the life of the development and, crucially, the development is reversible such that once its operational phase has ceased, the land will return to its current form with no impact on the soil or quality of the land.

- 8.31 This approach to solar development on the best and most versatile land was taken by the Inspector of a recent Appeal decision regarding the installation of a solar farm on grade 2 agricultural land at Manor Farm, Llanvapley in Monmouthshire (Planning Inspectorate reference APP/E6840/A/14/2212987). The Inspector concluded that the development would temporarily change the use of the land rather than its quality and would not affect its long-term potential for resumed agricultural use. The appeal was allowed, thus providing a precedent for similar developments and establishing the acceptability of temporarily locating solar panels, especially on less favourable agricultural land.
- 8.32 As a final point, it is noteworthy that the Local Planning Authority has it in their gift to impose a planning condition controlling the de-commissioning of the site following a period of 25 years, or within 6 months of the cessation of electricity generation, whichever is the sooner. This is a condition which is suggested by PPW and will ensure that the land is restored to its former condition such that any impact would not be irreversible.

Archaeological Impact

- 8.33 The Archaeological Assessment prepared by Archaeology Wales drew on the findings of a site visit and desk-top assessment. It concluded that there are no designated historic landscape areas, Listed Buildings or Scheduled Ancient Monuments within the proposed development area. Moreover, that the propose development will not adversely affect the heritage significance/setting of designated assets in the wider area.
- 8.34 The report identifies the presence of designated and undesignated archaeological resources in the wider search area and as such recommends a precautionary approach in the form of a suitable form of mitigation – that is an archaeological watching brief during all intrusive groundworks. The proposal therefore accords with national and local policy requirements (namely Policy ENV18).

Glint and Glare

- 8.35 It is noted that the Welsh Assembly Government (WAG) Practice Guidance does state that despite their non-reflective design, it is possible that intense direct reflections of the sun ('glint'/'specular

reflection') or more diffuse reflections of the bright sky around the sun ('glare') by solar PV panels (and their supporting frames) may cause viewer distraction. In addition to increasing the visual impact of a development in the landscape this can potentially impact on air traffic safety.

- 8.36 No UDP policies are relevant in this respect, however Glint and Glare is nevertheless considered to be a material consideration in the determination of this planning application. The reader will note that a Glint and Glare Assessment has been prepared in support of the planning application which concludes that the proposed development will have no detrimental impact on aerodrome safeguarding aspects in respect of either St Athan Airfield or Cardiff Wales Airport.
- 8.37 The proposal is therefore considered to be acceptable in these terms and it is considered that there is no evidence to suggest that the development would represent a hazard to air safety.

Summary

- 8.38 When considering applications for development, the LPA is obliged to identify demonstrable harm to matters of acknowledged importance. This Planning Statement does not indicate that any such demonstrable harm exists in this instance, only minor issues for which appropriate mitigation can be provided. Any harm, however, insignificant, must be balanced against the benefits of the scheme, including its contribution towards meeting National renewable energy targets, and the policy aims of the Wales Spatial Plan, Planning Policy Wales, TAN 8, and the adopted Vale of Glamorgan UDP, which seek to enable the supply of renewable energy through environmentally acceptable solutions.
- 8.39 The proposed development intends to have a life span of 25 years. It is therefore temporary and reversible in nature.

Conclusion

- 9.1 This planning statement is submitted in support of a full planning application for the construction of a ground-mounted solar photovoltaic (PV) generation project and associated works on land at Rosedew Farm, Llantwit Major.
- 9.2 This statement demonstrates that the proposed development wholly accords with relevant national and local planning policy and any other material considerations. It achieves a sustainable development by contributing to renewable energy needs, rural diversification, whilst minimising impacts and preserving the openness of the area.
- 9.3 As such the proposals are fully in accordance with national guidance and policies, together with policies in the adopted Vale of Glamorgan Unitary Development Plan.
- 9.4 In light of the above, it is respectfully requested that the Vale of Glamorgan Council grants planning permission for the proposed development, as submitted.