

CV/AC/BRS.5421

30<sup>th</sup> March 2015

Mr M Goldsworthy  
The Vale of Glamorgan Council  
Development Control  
Dock Office  
Barry Docks  
Barry  
CF63 4RT

15/00246/SC2

**VIA EMAIL ONLY**

Dear Mr Goldsworthy

**Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999**  
**Regulation 10 Request for Scoping Opinion**  
**Proposed Solar Park on land at Home Farm, Drope Road, St George's-super-Ely, Cardiff, CF5 6EP**

Pegasus Group hereby requests a Scoping Opinion from the Vale of Glamorgan Council for a proposed solar farm with a capacity of up to 3MW at the above location. This request follows from the Local Planning Authority's screening opinion, determining that the proposals would constitute 'EIA Development', received on 23<sup>rd</sup> January 2015.

The purpose of this letter is to set out the details of the proposed development, the site and the surrounding area and to highlight the areas and approach currently considered appropriate for inclusion within the EIA to assist with the formal scoping process.

Regulation 10(1) of the 1999 Regulations provides for a person who is minded to make an EIA application to ask the relevant planning authority to state in writing their opinion as to the information to be provided in the Environmental Statement ("Scoping Opinion"). Regulation 10(2) of the 1999 Regulations sets out the requirements for a scoping request in relation to a planning permission, these are:-

- a plan sufficient to identify the land;
- a brief description of the nature and purpose of the development and of its possible effects on the environment; and
- such other information or representations as the person making the request may wish to provide or make.

The remainder of this letter provides:-

- Details about the project team;
- Site description;
- Development proposal;
- Proposed structure of the Environmental Statement; and
- Topics to be scoped out of the Environmental Statement.

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## **1. The Project Team**

Cenin Renewables are advised by a team of experienced consultants. Those working on the project design, EIA and planning application submission are set out below:-

- Pegasus Group:- lead planning and environmental consultants providing planning advice, technical assessments of environment in terms of landscape; and co-ordinating the EIA;
- Clive Onions Ltd:- providing technical advice and support with regards to Hydrology, Hydrogeology and Ground Conditions;
- Michael Woods Associates:- providing ecological and nature conservation advice;
- Cotswold Archaeology Ltd:- are providing archaeological and cultural heritage advice;
- Kernon Countryside Consultants Ltd.:- providing technical input with regards to agriculture and soil conditions;
- Transport Planning Associates:- providing technical input with regards to traffic and access.

## **2. Site Description**

Centred at National Grid Reference ST 10277 75818, the site comprises approximately 8 hectares of agricultural land located 0.4km to the west of Drope Farm.

The site comprises 3 no. agricultural fields which form an irregular 'J' shaped parcel of land. Each of the fields defined by mature tree and hedge lines. The site gently slopes southwards and is bound by mature woodland to the east, south and west.

Two ponds are located within the central area of the northernmost field, outside the application boundary. Land immediately north and northwest of the site encompasses agricultural fields, each defined by mature boundary hedgerow. The village of St George is located approximately 0.6m north of the site from its nearest point.

A Public Right of Way routes across the northernmost and southernmost fields, adjacent to the sites eastern boundary. The closest residential properties are Ffordd Cottages located 0.2km from the sites western boundary.

Fields to the west of the site contain ditches and are marshy in character. The marshy nature of these fields attracts wildlife and as such, is designated as a Site of Important Nature Conservation (SINC).

The mature woodland south of the site encompasses part of Coedarhydyglyn historic park. Within the Park, circa 540m southeast of the site boundary is the Grade 1 listed Coedarhydyglyn House. The site is visually separated from the listed building by intervening land which is steep in topography and dense with woodland.

A Site Location Plan is enclosed.

### **3. Development Proposal**

The proposal is for a circa 3MW ground mounted solar photovoltaic arrays which comprises parallel arrays of south facing ground mounted panels set at an angle of circa 30° (degrees) in order to capture maximum solar energy. The front edge of the panels would be 0.9m above ground (to allow for sheep grazing) with the trailing top edge set at a maximum of 2.6m above the ground. The metal framework that houses the modules will be supported at intervals by double mounted posts approximately 5.9m apart. The posts will be driven into the ground at a depth of approximately 1.5m.

#### *Operational lifespan*

The development is expected to generate clean renewable energy for around a 25 year period. The development proposal, by virtue of its design and installation methodology, has a relatively low impact on existing ground conditions, particularly as there are no significant foundation or infrastructure requirements.

#### *Site Safety and Security*

The arrays would be set within a 2.0m high deer stock fence. The distance between the proposed fencing and existing hedges would vary across the site and at its minimum distance this would be circa 5m. The security measures that will accompany the scheme include pole mounted CCTV.

#### *Connectivity*

The renewable energy would be exported and connected to the local electricity network. The point of connection is located at St George, circa 550m north of the site. Underground cabling is proposed from the site to the point of connection as illustrated on the Site Location Plan (blue line).

#### *Construction*

At this time it is envisaged that construction of the scheme will take up to three months.

#### *Restoration*

The application proposal is a temporary structure with an operational lifespan of approximately 25 years. Following the cessation of energy generation at the site, and as part of the contractual obligation with the landowner, the proposal will be decommissioned and all plant and machinery will be removed from site.

#### *Geology, Hydrology and Flood Risk*

The solar panels will not affect water storage volume on the site. The design of the installation is such that it does not decrease the capacity of the field to absorb rainfall and will not increase run off to other areas. A Flood Consequence Assessment (FCA) will accompany any planning application as the development site is in excess of 1 hectare.

#### *Production of Waste*

The development proposal will not generate operational waste. The solar panels will be designed to last for a lifespan of 25 years during which time there are no anticipated waste by-products arising from their usage. The panels are recyclable.

#### *Nuisance*

There is no anticipated pollution, noise or nuisance. The arrays will be fixed and as such will not generate any noise. The materials used in the array's construction are specifically designed to absorb light rather than reflect it. With regards to the construction phase, the development will accord with the principles set out through the Construction (Design and Management) Regulations 2007.

#### *Access*

The proposed access for construction and operational traffic is from an existing gate access leading from Drope Road. The internal access track will route along the edge of 2 no. fields, though exiting gate access point and into the site. This access is currently used by farm vehicles. A temporary construction compound is proposed near the field entrance leading from Drope Road.

Vehicle movements associated during operation of the solar farm are very low, being mainly associated with monitoring and cleaning. A service engineer is expected to access the site infrequently as and when issues with the equipment occur.

*Risk of accidents, having regard in particular to substances or technologies used.*  
None are anticipated.

#### *Air Quality*

There are no emissions generated with the operation of the solar panels.

#### **4. Proposed Content of the Environmental Statement**

The legal minimum requirements for the content of an Environmental Statement (ES) are set out in Schedule 4 of the EIA Regulations. Regulation 2(1) of the EIA Regulations defines an ES as a statement that includes "(a) such information referred to in Part I of Schedule 4 as is reasonably required to assess the environmental effects of the development and which the applicant can, having regard to current knowledge and methods of assessment, reasonably be required to compile, but (b) that includes at least the information referred to in Part II of Schedule 4".

The information required for inclusion in the ES, as set out in Schedule 4 of the Regulations, is reported below:-

1. Description of the development, including in particular—
  - (a) a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;
  - (b) a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;
  - (c) an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc) resulting from the operation of the proposed development.
2. An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for the choice made, taking into account the environmental effects.
3. A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above

factors.

4. A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from—

- (a) the existence of the development;
- (b) the use of natural resources;
- (c) the emission of pollutants, the creation of nuisances and the elimination of waste, and the description by the applicant or appellant of the forecasting methods used to assess the effects on the environment.

5. A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.

6. A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.

7. An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant or appellant in compiling the required information.

#### PART 2

1. A description of the development comprising information on the site, design and size of the development.

2. A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects.

3. The data required to identify and assess the main effects which the development is likely to have on the environment.

4. An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for the choice made, taking into account the environmental effects.

5. A non-technical summary of the information provided under paragraphs 1 to 4 of this Part.

It is recognised that for the ES to fulfil its primary objective of enabling environmental considerations to be incorporated into the decision-making process, it must be focused on the most potentially significant environmental issues.

The proposed structure of the Environmental Statement has been developed following an initial review of the site; a review of the relevant development plan policy; Vale of Glamorgan Screening Opinion dated 20<sup>th</sup> January 2015; and Pegasus' previous experience of similar developments.

The proposed structure for the Environmental Statement is:-

- Environmental Statement Volume 1 (Main Written Statement):-
  - i. Chapter 1 – Introduction and Background
  - ii. Chapter 2 - Site Description
  - iii. Chapter 3 - Planning History and Policy Context
  - iv. Chapter 4 - Description of Development
  - v. Chapter 5 - Alternatives
  - vi. Technical Chapter 6 - Landscape and Visual Impact
  - vii. Technical Chapter 7 - Ecology and Nature Conservation
  - viii. Technical Chapter 8 – Cultural Heritage and Archaeology
- Environmental Statement Volume 2 (Technical Appendices); and

- A non-technical summary as a separate document.

Liaison between the consultants will take place where necessary to ensure that where interdisciplinary issues arise, they are dealt with in the most appropriate way.

The proposed structure of the individual chapters are summarised below:-

*Introduction and Background Chapter*

This chapter will include narrative on the format and content of the ES and the statutory background to the EIA process. It will include information regarding the applicant, the assessment team and the organisation of the ES.

*Planning Policy and Planning History Chapter*

This chapter will include information regarding the planning history of the site and a review of the policy context at the European, national, regional and local level. The relevant policies will be reviewed and key points of relevance summarised. This section will set the context for more detailed topic policy analysis that will be included within the specific environmental chapters of the ES.

*The Site and its Setting Chapter*

This chapter will provide a description of the existing site and land-use, its surroundings, and how it is likely to change over time irrespective of the scheme being developed. Other chapters of the ES will provide detailed description of the development site with regards to particular environmental topics, providing where appropriate surveys from which the effects of the proposals may be evaluated.

*Description of Development Chapter*

This chapter will describe the development for which planning permission is sought. It will include details of the proposed layout of the solar park together with a description of the technology proposed. This chapter will set out the basis against which the environmental impact assessment will be conducted.

*Alternatives Chapter*

The chapter on alternatives will start with an explanation why the site has been selected. Alternative technologies for energy generation will also be considered for the site.

Main Element of the EIA and Environmental Statement

The main element of the EIA work will comprise a series of environmental studies undertaken by specialists engaged by Cenin Renewables. These studies will be presented as individual chapters within the Environmental Statement (namely (i) Landscape and Visual (ii) Ecology and Nature Conservation (iii) Cultural Heritage and Archaeology). Where appropriate, detailed information would be presented in the technical appendices of the Environmental Statement. Each specialist will prepare a technical report (ES chapter) that will comprise:-

- Methodology used;
- Baseline analysis;
- Prediction of potential impacts;
- Mitigation; and

- Evaluation of residual effects.

A number of baseline studies will be undertaken in order to understand the current position with regard to environmental issues. Further research will influence the detailed design of the solar park and be reported in the ES.

Each of the potential impacts identified in the EIA will be considered in terms of its nature, the physical extent of its influence and the magnitude of its effects. Qualitative and quantitative techniques will be used to assess these impacts as appropriate. The framework used to consistently establish impact significance will be set out in each ES chapter. Each predicted impact and residual effect will be ascribed one of the following levels of significance:-

- Negligible;
- Low;
- Medium; or
- High.

The EIA will identify those elements which have been introduced to mitigate potential adverse effects. Mitigation can be categorised into two types: 'inherent mitigation' and 'additional mitigation'. Inherent mitigation is amelioration which is a fundamental part of the scheme and can generally be represented in the proposed layout.

Additional mitigation tends to be more detailed and is not generally capable of being shown in scheme description plans. Individual planning conditions and legal agreement clauses therefore need to be formulated to require the submission of details for approval by the planning authority in order to ensure implementation.

In respect of cumulative effects, we understand that in January 2015 (date of screening opinion) no other large scale solar array developments (either in operation or in planning) were identified within proximity of the site. While it is necessary to consider cumulative impact of this proposal with others, it is considered that there would be no significant cumulative impact.

The predicted effects of the development proposal will be assessed against the existing baseline environment.

The structure of the specific technical chapters are set out below.

### ***Landscape and Visual***

Landscape assessment is concerned with the change in the physical landscape in terms of elements/features that may give rise to changes in the characteristics of the land. Visual assessment is concerned with changes to the nature of existing views. Changes may result in adverse or beneficial impacts. The significance of impacts is a result of the interaction between the sensitivity of the landscape resource or visual receptor to change the magnitude of change.

#### ***Baseline***

In considering the likely impacts of the development the predicted effects of the scheme will be assessed against the existing baseline environment i.e. the landscape and views as they exist at the time of the assessment.

*Proposed scope of assessment*

An assessment of the landscape and visual impacts will be undertaken in accordance with the latest guidelines issued by the Landscape Institute, and Institute of Environmental Management and Assessment. The findings of the LVIA should inform the landscape mitigation proposals.

The assessment will define the baseline study area in landscape terms. It will be carried out using a combination of desktop research and field survey work to establish the landscape baseline against which impacts may be assessed. The sources of baseline information will include Ordnance survey maps. Any relevant landscape planning designation will be reviewed and a landscape character appraisal will be undertaken which would define the local landscape character and their sensitivity to change. National, regional and local planning policy of relevance to the proposal and site will be reviewed.

The proposed development will be described in terms of its relationship to existing landscape feature, including topography, watercourses and vegetation. An appraisal will be undertaken to identify the zone of visual influence for the development, as well as the principal views to the site.

The operational impacts or the development will be viewed in terms of:-

- The effects on landscape character; and
- The effects on visual amenity.

The effects on visual amenity is likely to be assessed:-

- On the basis of the impact of the proposed development in year 1 in winter (maximum impact); and
- On the basis of the impact of the proposed development in year 10 (in winter and summer).

Photomontages of the proposed development, taken agreed viewpoints, will be produced to assist in the assessment of the likely visual effects.

*Limitations of LVIA*

The visual assessment will be based on analysis of OS mapping of the site and surrounding area and on field surveys towards the site from publicly accessible viewpoints in the surrounding landscape. Although every effort will be made to include viewpoints in sensitive locations and locations from which the development would be most visible, not all public viewpoints from which the development would be seen will be included in the assessment.

***Ecology and Nature Conservation***

An ecological walkover survey and report has been commissioned, which will review the Habitat Survey of Wales and record all habitats according to the JNCC Phase 1 criteria. Additional surveys will be undertaken for breeding birds, great crested newts including surveys of all ponds within 250m of the site. The phase I survey report and other survey reports would be used to inform the preparation of the Ecology chapter of the Environmental Statement. This would present a summary of the survey findings



and an assessment of impacts following the IEEM impact assessment methodology and details of mitigation measures. We would aim to reduce any negative ecological impacts identified to neutral (or near neutral) levels through mitigation measures.

Michael Woods Associates will undertake further consultation with the Council's Ecologist in order to agree the scope of works likely to be necessary to inform the impact assessment.

### ***Cultural Heritage and Archaeology***

The scope of works will be agreed with the local planning authorities archaeological and conservation advisors, the Glamorgan-Gwent Archaeological Trust (GGAT) to agree the scope of the assessment with specific regards to the setting of the historic park and Grade I listed building.

A geophysical survey of the full extent of the site has been undertaken. The results determine that there does not appear to be a great deal of archaeological interest, with exception of a possible ditched enclosure feature within the central part of the site.

The EIA chapter will assess the effect of the development proposal on the known and potential heritage resources within and surrounding the development site. Compilation of the EIA chapter will include the results of a recent geophysical survey including a Desk Based heritage Assessment (DBA).

Given the nature of the potential archaeological remains (i.e. isolated), and the very restricted degree of physical impact entailed by the development, any adverse physical impacts upon currently unrecorded below-ground remains would be very limited.

### ***Non-Technical Summary***

The non-technical summary will provide, in plain English, an accurate and balanced summary of the main document and will contain illustrative material that assists the description of the solar park and its environmental effects.

## **5. Topics to be Scoped Out**

Reflecting the nature of the development proposal we propose to scope out the following topics:-

### **Traffic and Highways**

The vehicle movements associated during operation of the solar farm are very low, being mainly associated with monitoring and cleaning. Trip generation is infrequent and expected to be circa one visit per calendar month. The predicted vehicle movements associated with the operational phase of the development is not expected to be sensitive to the local environment. As such, we request that this element is scoped out of the EIA.

Turning to construction, the proposed access for construction traffic (and operational traffic) is from Drope Road via an existing access gate. The access is currently used by farm vehicles. During the construction and operational phase of the proposal vehicle movements will not deviate from this well established means of accessing the site.

A Construction Traffic Management Plan (CTMP) would accompany the planning application submission that will be informed by a detailed site visit and preparation of a mitigation strategy for the route to the site including plans confirming illustratively and/or any measures that may be required. It will also set out the management strategy for deliveries and swept path assessments will be provided at the site access as appropriate. The predicted vehicle movements associated with the construction phase of the development is not expected to be sensitive to the local environment. As such, we request that this element is scoped out of the EIA. Transport Consultants, TPA, will undertake further consultation with the Highways Department in order to agree the structure and contents of the CTMP.

### **Agriculture**

Any impact that the solar array would have on the site would not prejudice the quality of the land or its capability for future agricultural output. The arrays do not emit any by product and there is no other aspect of the proposal that might damage the quality of the soil. Accordingly it is requested that this topic is scoped out of the EIA. An Agricultural Assessment would accompany any planning application submission.

### **Air quality**

The proposed plant, equipment and associated infrastructure are inherently designed to operate in the open air, and as such will not give rise to any unacceptable adverse impacts. There is, therefore no basis to assume that the proposal would have a significant effect on air quality of the locality.

### **Acoustics and Vibration**

Noise impact is limited to the construction phase of the development, whereby there would be minor impacts generated by the vehicle movements across the site coupled with the installation of equipment.

Once operational, the sub-stations which accompany the scheme may generate additional background noise levels; however any noise is mitigated in its housing through effective insulation. The arrays will be fixed and as such will not generate any noise.

The development site and its immediate surround are not considered to be environmentally sensitive in terms of the predicted noise output to be generated by the site and as such this topic should be scoped out of the EIA. An assessment of noise impacts will be provided within the Planning Statement that would accompany any submitted planning application.

### **Socio Economics**

The development proposal would not have a significant effect on the micro economy, living conditions of the local community. Impacts upon users of the adjacent PROW will be addressed accordingly within the Landscape and Visual ES chapter. As such there is no basis to assume that the socio-economic impacts must be considered as part of the EIA.

## Hydrology and Flood Risk

A Flood Consequence Assessment will accompany the planning application.

The site occupies generally flat land at around 45m AOD, with watercourses and springs around the site, but none shown to be within the site. The site is generally in a flat bottom valley, with steeply rising land to the south. The site is not shown to be at risk of flooding according to the TAN 15 DAM maps, but it is close to Zone B, known to have flooded.

The Flood Consequence Assessment will include a geotechnical desk study to ascertain the permeability of the ground before considering the localised falls and need for swales to manage runoff. If swales are recommended, the report will be supported with swale calculations.

The solar panels will not affect water storage volume on the site. The design of the installation is such that it does not decrease the capacity of the field to absorb rainfall and will not increase run off to other areas. Accordingly it is requested that this topic is scoped out of the EIA.

We look forward to receiving the Council's Scoping response within the timeframe specified by the EIA Regulations. Should additional information be required from either the Council or statutory consultees please do not hesitate to contact me directly.

Yours sincerely



**Colin Virtue**  
**Director**  
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cc

encs: Site Location Plan

RECEIVED

31 MAR 2015

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ACTION BY:
NO: 22
ACK: