

2015/00503/sc1.

Our Ref: SBC1046/MLG/PA/2

Date: 5th May 2015



Development and Building Control
The Vale of Glamorgan Council
Dock Office
Barry Docks
Barry
CF63 4RT

Office Suite 2
The Beacon Centre for Enterprise
Dafen
Llanelli
SA14 8LQ

Tel: 01554 780544
Fax: 01554 759988

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www.stratus-environmental.co.uk

Dear Sir/Madam,

Proposed Solar Photovoltaic Development on land at Corntown Farm, Bridgend – Request for Screening Opinion

Following on from our recent submission regarding a request for Pre-Application advice dated 1st May 2015, please find this correspondence as a request for a Screening Opinion under Regulation 5 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011 (the EIA Regulations), to establish whether or not a planning application for the proposed development should be accompanied by an Environmental Statement.

The EIA Regulations state that requests for Screening Opinions shall be accompanied by a plan to identify the land, a brief description of the nature and purpose of the proposal and if possible effects to the environment. The following commentary provides a description of the proposal and site location and indicative layout drawings are attached for reference purposes.

Introduction

In order to address the damaging effects of climate change, we need to move away from burning our limited fossil fuel reserves to using more sustainable, cleaner, renewable energy sources. In 2009, the UK signed up to the European Union's Renewable Energy Directive which commits the country to delivering 15% of all energy from renewable sources by 2020. To meet this target, 35-45% of electricity generated will have to come from green sources including renewable energy technologies such as solar, wind, biomass, wave and tidal. In quarter 4 of 2014, only 22% of electricity was generated from renewable sources. As of the end of January 2015 there was 5.14GW installed capacity of solar energy within the UK and the UK Renewable Energy Roadmap (updated 2014) states that there is *"significant potential for further deployment...with 20 GW being our current estimate of the technical maximum level of solar PV deployment by 2020.*

In April 2014, the UK Government (DECC) published its Solar PV Strategy, outlining its vision for Solar PV development in the UK. The main message from the Strategy is to focus growth of solar



Office locations: Leeds Rossett Llanelli
Stratus Environmental Limited registered in England 7057801



PV in the UK on domestic and commercial roof space and on previously used land. Furthermore, the National Planning Practice Guidance (NPPG) published in March 2014 refers to focusing solar farm development on non-agricultural land or agricultural land which is of poor quality, i.e. not considered Best and Most Versatile (BMV).

Solar farms are a simple and established technology providing a source of safe and clean energy which produce zero emissions when in operation. Solar energy is not only sustainable; it is renewable meaning that we will never run out of it. It also enjoys the highest levels of public support for renewable energy in the UK, with 81% of the general public in favour¹. Solar farms are a relatively small, effective and unobtrusive way of creating the electricity we all use, with the panels having a low visual impact on the local landscape and creating no noise, pollution, bi-products or emissions.

The Proposed Development

Sirius SBC Renewables LLP, the applicant, is proposing to construct and operate a solar photovoltaic (PV) farm on approximately 8.8ha of agricultural land, on a landholding associated with the Corntown Farm estate, adjacent to the A48 (Crack Hill). The development site is located c. 1.3km to the north west of the village of Colwinston, c. 1.7km south east of Corntown and c. 3.9km south east of the town of Bridgend on National Grid Reference (NGR) 293834,176728. The site location is illustrated on **Drawing No. SBC1046/4/01**. Vehicles will turn right off the A48 onto the B4524 Corntown Road and into the site via the existing gated access point.

The solar farm will consist of photovoltaic (PV) panels laid out in arrays of rows running from east to west across the development area. Each array will be mounted on simple metal frame work. It is envisaged that the panels will utilise a foundation system consisting of galvanized steel posts which are driven into the ground, or a low penetration mounting system such as near surface mounted ballasted or shallow ground anchoring arrangement. Which foundation design is used will be dependent on site specific ground conditions. The proposed solar farm would have the capacity of approximately 3.25MWp of electricity, providing enough to power up to 698 homes² per year and offset up to 1349 tonnes of CO₂ every year. Typical mounting details and panels are illustrated overleaf.



¹ Public Attitudes Survey, February 2015(DECC)

² Based on an average annual domestic usage of 4226kWh

Figure 1: Photograph of Typical Mounting Details (N.B. indicative of mounting details only)



Figure 2: Photograph of Typical Panel Array (N.B. indicative of typical panels only)



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The highest part of the panel will be no higher than 3m from the ground and the lowest part at 900mm. There is limited ground disturbance and the installation can be easily removed with no long term effect.

Each solar panel will measure approximately 1m wide and 1.6m in length, secured to a mounting frame, and angled between 15 and 35 degrees to the horizontal.

The indicative site layout is illustrated on **Drawing No. SBC1046/4/02**. Construction of the development would typically take 2 to 3 months to complete. Once operational the development would largely be autonomous and visits would be limited to around once every three months by a man in a van.

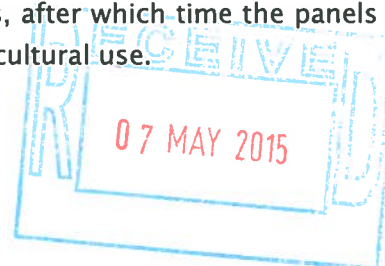
The arrays will be connected to inverter and transformer stations are currently proposed to be located within the central part of the site along an existing treeline. Cables will connect the transformer stations to the on-site substation, with the on-site substation connecting to the local distribution network. To secure the site, a fence approximately 2 metres high will be erected around the site and infra-red CCTV coverage will be provided. The fencing is likely to be deer fencing, or similar, so as to provide a visually recessive and less obtrusive visual element into the landscape; the exact specification will be agreed with the LPA. Following construction of the solar farm, a scheme of biodiversity enhancement will be implemented as part of the scheme and full details would be provided as part of any application.

The proposal will comprise the following:

- Photovoltaic (PV) panels and associated supporting frames;
- Inverter and transformer stations (housed in prefabricated containers) and on-site substations;
- Below ground cabling linking inverter and transformer stations to the substations;
- Perimeter fencing and inward facing infra-red (invisible) CCTV;
- Internal service roads;
- Temporary set down area;
- Site access during the construction and operational phases; and
- Scheme of landscaping

The electricity generated by the development will be supplied to the local distribution network via an underground cable.

The proposal, by virtue of design and method of installation, will be non-intrusive and could be removed with little long-term effect; there are no foundations or significant infrastructure requirements. The lifespan of the panels is up to 25-30 years, after which time the panels can be lifted and removed from the site and the land returned to agricultural use.





EIA Assessment Criteria

Solar farm developments are not specifically listed under either Schedule 1 or Schedule 2 developments of the EIA regulations. However Schedule 2 refers to 'Energy Infrastructure' categories and it is considered that the proposal falls within the category of "industrial installations for the production of electricity, steam and hot water". The applicable threshold for EIA development exceeds 0.5 hectares, and, as such, the local planning authority must screen the proposal (by the criteria listed in Schedule 3) to ascertain whether there are likely to be significant effects on the environment.

The characteristics, location of the development and nature of potential impacts are considered below.

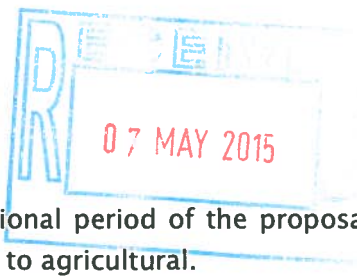
Characteristics of Development

- a) Whilst the site of the proposal covers a large area, the limited height of the panels (top of panel less than 3m above ground level), their non-intrusive structure and their benign and ephemeral nature means it is unlikely that they will have an environmental impact. They do not have any complex or hazardous environmental effects either during construction or operation.
- b) The benign nature of the PV panels means there is limited opportunity for 'significant' cumulative impacts.
- c) The proposed development will have an anticipated lifespan of approximately 25–30 years and requires limited maintenance, thus consuming limited resources.
- d) During the lifespan little or no waste will be generated during energy generation. Solar farms are at the leading edge of zero emission energy generation.
- e) The benign nature of the panels and proposal development would not create pollution or nuisance.
- f) The development would not involve the application of substances or technologies that would create a significant risk.

Location of Development

The proposed development will be located on agricultural land which is currently utilised for the grazing of sheep. The site and surrounding area is predominantly semi-rural in nature, characterised by farmland, scattered residential properties and small villages with a large industrial area (Waterton) situated approximately 1.2km to the north west. The closest settlements are the villages of Colwinston approximately 1.3km south east and Corntown 1.7km to the north west. A single 500kW wind turbine has been consented near St Mary Hill, approximately 3km to the north east of the site.

The proposed solar panels will be designed to ensure that it is generally non-intrusive to the existing ground conditions and its penetration into underlying agricultural land will be limited. It is considered that the proposals are an alternative yet beneficial use of agricultural land. Whilst the solar park is in operation intervening spaces between the panels have the potential to be used as



grazing land. Following the operational period of the proposal all infrastructure can be removed from the site and the land returned to agricultural.

The site is within an Aviation Safeguarding Zone with the Unitary Development Plan for the Vale of Glamorgan. Unlike developments for onshore wind, given that the solar farm will be a maximum of 3m in height it is anticipated that it will not compromise aviation safety.

Further to this, it is also allocated as a Minerals Safeguarding Area for limestone (category 1 in the western half of the site as well as category 1 and 2 in the east) in the deposit Local Development Plan for the Vale of Glamorgan which is currently undergoing examination. The proposed solar farm will be a temporary development for a period of up to 25 to 30 years; therefore it will not sterilise or hinder future extraction.

There is an area well outside of the development footprint designated as a "Green Wedge" to the north west of the site, however due to the location of the proposal outside this designation, it is not considered to conflict with proposals put forward in the deposit LDP. Notwithstanding the above, and in consideration of its location in a semi-rural setting, a full Landscape and Visual Impact Assessment will accompany the application.

Given the nature and of the proposed development and the fact that the PV panels will not give rise to any pollution due to their benign nature means that the proposal would not have significant environmental impacts on the surrounding area.

The nearest listed building to the site is the Milepost by Crack Hill House (A48 Crack Hill) which is situated approximately 25m to the north of the development site. The closest Scheduled Ancient Monument (Corntown Causeway Enclosure) is located approximately 915m to the south west. Given the limited construction requirements, the operational nature of the development and the lack of pollution arising from PV panels due to their benign nature, the proposal is unlikely to have any potentially significant indirect impacts on any designated features. However, an archeological and cultural heritage assessment will accompany the planning application, which will consider any potential for direct and indirect impacts.

There are no public rights of way (PRoW) which directly cross the development site (however there is one noted that is adjacent to the western boundary). It is not anticipated that any PRoW would be affected by the proposed development.

The nearest residential receptors are Crack Hill House c.25m to the north east and a commercial establishment c.113m to the northwest. A scheme of landscaping is proposed as part of the development which will include additional screen planting where necessary. The landscape plan will create a vegetation buffer from the nearest residential receptors and thus potential 'significant' effects are considered unlikely.

The site is located within Flood Zone A (considered to be at little or no risk of fluvial or coastal/tidal flooding) under the Technical Advice Note 15 Development and Flood Risk therefore a justification test is not required. Notwithstanding this, a Flood Risk Assessment (FRA) of an



appropriate level of detail will be carried out as part of the planning application which will be used to indicate any potential effects of the solar farm on the existing 'greenfield' runoff rate.

It is noted that a solar farm is an inherently quiet installation with no moving parts involved in the generation of electricity. The equipment which has the potential to generate noise consists of the transformers and fans associated with the invertors which can be located and orientated in order to achieve acceptable sound levels.

Characteristics of the Potential Impact

- a) Whilst the size of the development area is reasonably extensive, it is unlikely to directly or indirectly affect an area of significant population.
- b) The development site would not cross or impact upon local authority boundaries as impacts beyond the site boundary would be limited in extent.
- c) The benign nature of the proposal means that the magnitude or complexity of any impacts would not be significant.
- d) The appropriate technical assessments to accompany any planning application will demonstrate that any potential impacts will be limited.
- e) Following the operational period of the facility, the site can be restored to reflect the context of the surrounding area. Any potential visual impact of the proposed solar farm would be limited to the PV arrays as ancillary development is limited.

It is therefore considered that the proposed development falls outside the description of Schedule 2 development and the characteristics on the proposal (as detailed in Schedule 3) are not likely to have the potential for a significant environmental affect to warrant an EIA.

Notwithstanding, the planning application submission documents will consist of the following:

- Supporting Statement and Design and Access Statement referencing the following:
 - Landscape and Visual Impact Assessment;
 - Noise Assessment;
 - Archeological and Cultural Heritage Assessment;
 - Ecological Appraisal;
 - Flood Risk Assessment; and
 - Planning Policy Appraisal.
- The planning application will be supported by drawings illustrating;
 - general site layout, panel layout and mounting systems, infrastructure details (elevations of transformers/cabinets), fencing and security arrangements, surface water drainage provisions.
- Appropriate technical and environmental assessments will be provided to support the planning application.



In conclusion, and having regard to all aforementioned factors, we respectfully request the Council's formal opinion on the nature of the development, in the form of a Screening Opinion. We trust that you will consider the scope of works outlined in this letter is sufficient to assess the direction of travel for the planning application.

We look forward to receiving confirmation of this request. If you would like to discuss any of the above matters please contact the undersigned.

Yours sincerely,



Mark L Griffiths
Environmental Director
Stratus Environmental Limited

Enc: Drawing No. SBC1046/4/01 – Site Location Plan
Drawing No. SBC1046/4/02 – Indicative Site Layout

Cc: Sirius SBC Renewables LLP

