Econergy International Limited

Berrington Solar

Decommissioning Plan

RSK/MA/664027-00(00)

AUGUST 2023

RSK GENERAL NOTES

Project No.: RSK/MA/664027-00(00)

Title: Berrington Solar: Outline Decommissioning Plan

Client: Econergy International Limited

Date: 24 August 2023

Office: Manchester

Status: Draft

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CONTENTS

1 INTRODUCTION

This document has been prepared to establish the Site Decommissioning, Restoration and Aftercare Strategy for the proposed Berrington Solar Farm, to support the appeal planning application to Shropshire Council (ref: 22/04355/FUL) for the development Berrington Solar, proposed Solar Farm to the west of Berrington, Shrewsbury, SY5 6HA.

1.1 The Project

The project consists of the construction of a ground mounted solar farm, with design capacity of up to 30MW Solar development comprising:

Ground mounted solar PV panels;

Vehicular access;

Internal access tracks;

Landscaping; and

Associated infrastructure including:

- Site fencing;
- CCTV;
- Client storage containers; and
- Gird connection infrastructure including substation buildings and off-site cabling.

Each of the solar panels will be mounted on a one-axis tracker. The panels are covered by high transparency solar glass with an anti-reflective coating which minimises glare and glint, whilst also aiding in the maximum absorption of the available sunlight.

This document sits alongside the Outline Soil Management Plan prepared by RSK ADAS Limited, and the Construction Environmental Management Plan prepared by RSK Environment.

1.2 Project programme

Following 40 years of operation, it is anticipated that it could take as little as 2 months to decommission the proposed Solar Park.

Dismantling	Month	
	1	2
Site mobilization		
Civil works		
Mechanical work		
Electrical Works		
Demobilization		

1.3 Access

The proposed site access is located along the western boundary of the development onto Shrewsbury Road. The access will be for both construction and operational purposes. A new bellmouth will be constructed with a sealed surface followed by a stone access track with a field gate to secure the site.

1.4 Waste management

The Decommissioning and Restoration works have the potential to generate waste such as scrap metals, WEEE waste and other material. Whilst the primary purpose of the Site Waste Management Plan is to managing activities to reduce waste during the construction phase of the Development, it is anticipated that the principals of this plan will be adopted during the Decommissioning and Restoration works. Activities will aim to re-use, recycle or recover resources in accordance with waste management legislation and best practice, minimising the amount of material which may be required to be sent to landfill.

1.5 Soil Management

The outline Soil Resources Management Plan (SRMP) will be reviewed and form part of the decommissioning phase.

The purpose of the plan will be to:

to ensure the protection and conservation of soil resources

undertake best practice to maintain the physical properties of the soils

provide on-site reference on the management of the soil resource for site operators undertaking the decommissioning works

In addition to the best practice guidance in the SRMP, the following points are relevant to the management of soil resources at the decommissioning phase:

when solar farm infrastructure such as compounds, inverters etc and any ground coverings are removed the subsoil condition should be examined by digging a trial pit

where appropriate the subsoils may be loosened ideally with a subsoiler set up to the appropriate depth and spacing to alleviate compaction or with an excavator ripper attachment

the surface of the subsoil should be cleared of any debris and large stones

across the site trial pits should be dug to assess the soil profile for any compaction. If compaction is identified should be undertaken to contribute to a programme of remediation works should be devised and undertaken • should there be deep compaction (>450mm depth) in the soil profile the use of specialist equipment should be considered

grass on the soil bunds will be sprayed off 10 days before soil reinstatement

examine the conditions of the soil under the bunds and take remedial action such as loosening if required

where there have been compounds or fuelling points the subsoil should be sampled and a UKAS and MCERTS (or equivalent) laboratory analysis undertaken for metals, oils and Polycyclic Aromatic Hydrocarbons (PAHs)

the decommissioning phase and reinstatement of soil should be monitored by a suitably qualified competent person. Records of operations should be kept with photographic evidence

soil conditions for pile pull out should be dry and friable (to be reviewed as part of the decommissioning plan)

any void left after pile pull out should be examined and may require in-filling with similar soil; and

the condition of field drainage should be assessed and reviewed for any remedial action

2 METHOD OF WORKS

2.1 Pre-decommissioning surveys

No more than 12 months prior to the decommissioning commencing, an ecological survey would be undertaken to identify ecological constraints arising from decommissioning activities. The site will be surveyed by an appropriately qualified ecologist to identify any ecological constraints arising from decommissioning activities.

Depending on the ecological value of the habitats that develop over the lifespan of the scheme, it is possible that certain areas of the site may need to be retained due to their value for wildlife on decommissioning. Further surveys for protected species which could be impacted by decommissioning would also be expected.

No less than 6 months before the 40th anniversary of the first export date, a decommissioning and site restoration scheme would be submitted to the relevant planning authority for approval. The decommissioning strategy would detail how plant and equipment located within the Order Limits would be removed. The decommissioning strategy will follow the principles laid out in this Outline Decommissioning Strategy and informed by any mitigation requirements identified by the pre-decommissioning ecological survey(s).

2.2 Decommissioning works

The first step of decommissioning would be to make the site safe for work in accordance with the prevailing Environmental Legislation, Regulations, Standards and Guidance at the time of Operator (DNO). Once the site is completely de-energised in conjunction with the Distribution Network to the Decommissioning Contractor (s) to complete the decommissioning and removal work.

Following the de-energising, the principal activities for the decommissioning of the proposed Solar Park would be undertaken in the following order:

1) Removal of PV Panels, Inverter / Transformer Cabins and Control Building (including support structures) and onsite access track
2) Removal of underground electrical system.
3) Reuse / recycling / disposal of the Solar Park structures / equipment.

Accordingly, during decommissioning, traffic can be broadly split into three main categories. These categories are:

Decommissioning workforce movements;

Delivery of decommissioning plant / equipment;

Removal of Solar Park plant / equipment.

2.3 Traffic and transport

The traffic generated during decommissioning would be less than that generated during construction due to the fact that a proportion of the foundations would remain in situ (i.e.

the foundations would be removed to approximately 1m below ground level, and the buried using topsoil).

3 ENVIRONMENTAL MITIGATION AND CONTROLS

3.1 Pollution Prevention

All decommissioning and restoration works shall be undertaken in accordance with legislation and guidance prevailing at the time.

Precautions shall be taken to ensure the complete protection of watercourses and groundwater against pollution, silting and erosion during Decommissioning and Restoration operations.

Any material or substance which could cause pollution, including silty water, will be prevented from entering surface water drains or watercourses by the appropriate use of mitigation measures including; silt fences, cut-off drains, silt traps and drainage to vegetated areas (where appropriate).

Any silty water generated on site will ideally be channelled into vegetated areas at least 50 metres from watercourses to allow the settlement of solids. Where such a method is not practical silt traps or settlement lagoons shall be utilised and monitored to ensure stored surface water is kept to a minimum.

The movement of plant and other machinery will utilise tracks, with disturbances to the peatland environment avoided as far as possible.

All refuelling will be carried out in designated locations, a minimum of 10 metres, preferably 50 metres as good practice, away from watercourses with drip trays and spill kits available, in accordance with standard best practice across the construction industry.

Areas of oil / fuel / chemical storage and permanent refuelling shall be appropriately sited to prevent the downward percolation of contaminants to natural soils and groundwater.

All waste and stockpiled materials shall be stored in designated areas and isolated from surface water drains and a minimum of 10 metres, preferably 50 metres as good practice, away from watercourses.

The use of cut-off ditches, silt fences, silt traps and drainage to vegetated areas will be employed as required / appropriate in areas of excavation, stockpiling, dewatering and plant and wheel washing.

In the event of a pollutant spillage on site, the material shall be contained and SEPA notified immediately.

3.2 Mitigation measures

As described above, a number of mitigation measures are proposed to reduce environmental impact during the Decommissioning and Restoration works. These are summarised below:

Following good practice industry standard approaches;

On-site inspection and advice from appropriate environmental advisors'

Use of drip trays/spill kits;

Buffer zones to watercourses; and

Stockpiling of any excavated materials away from watercourses.

3.3 Monitoring

To ensure all mitigation measures put in place for the Decommissioning and Restoration works are maintained and continue to be effective, monitoring will be carried out. An environmental advisor / clerk of works will regularly inspect the contractor's works and associated Decommission and Restoration documentation.

The two main areas requiring monitoring of practices and compliance are environmental and pollution:

Environmental – the requirement for environmental assessments shall be undertaken throughout the works;

Pollution Issues – regular checks of plant and equipment to identify any oil or fuel leaks will be carried out to confirm the condition of the plant. Records will be kept of all inspections / findings for review by the environmental advisor / clerk of works for discussion during regular meetings. Regular checks for visual evidence of contamination / sediment shall be made alongside watercourses nearby working areas and in areas of surface water discharge..

3.4 Recording

Records will be kept for all initial; final and routine monitoring inspections of plant, ecological and environmental issues. These records will be stored in an agreed location on site and be available for internal and external monitoring as required.

Record sheets will detail the date; location of inspection; frequency; findings; appropriate person(s) notified and identified actions as necessary by the environmental advisor.