Proposed Installation of a Ground Mounted Solar Array at Normandy Pool, St. Mary's, Isles of Scilly

Design and Access Statement

March 2024 (update June 2024)

I. Executive Summary

Installation of a 11.0 kW grid connected ground mounted photovoltaic (PV) panel array could provide a lifetime equivalent of 51.8t (tCO₂LTE) and an annual saving of 2300 kgCO₂. Installation of PV panels in a meadow adjacent Normandy Pool is being proposed in line with the local authority's response to declaring a Climate Emergency in 2019 and its ambition to be carbon neutral by 2030. Additionally the works will be funded via the Sport England Swimming Pool Support Fund (SPSF) created in response to the cost-of-living crisis arising from Russia's invasion of Ukraine in 2022.

The meadow adjacent Normandy Pool is shielded by natural vegetation and hedging and has a good southerly aspect particularly suited to the installation of a photovoltaic array.

II. Introduction

This report provides am written description and justification for the installation of a proposed ground mounted photo-voltaic array on land adjacent to Normandy Pool, St. Mary's.

III. The Proposal

It is proposed to erect an 11kWhp grid connected, ground mounted solar array on meadow land adjacent to Normand Pool. The energy generated by the array will contribute to reducing the running costs of the pool climate control system. It is anticipated that the array will reduce carbon emissions by 2.3t CO₂ per year.

Surplus energy generated will either be exported to the grid or directed to an optional battery storage unit for use during low-light periods.

IV. Site location and description

It is proposed to mount the array on a ground mounted galvanised steel framework in the meadow adjacent to the pool, facing in a South Westerly direction at an angle of 30°.

The PV array will face towards the natural hedging surrounding the meadow.

V. Planning Context

Installation of a ground mounted photovoltaic panel adjacent Normandy Pool is being proposed as a small-scale project in line with the IOS Planning Authority's sustainable energy strategy that will demonstrate how a sustainable energy project may be appropriate within a landscape area recognised of special environmental value.

In addition the proposals are in accord with the Isles of Scilly Local Plan, Section 2 which seeks to outline the steps necessary to "Promote a Sustainable Scilly".

For small scale proposals such as this PPS22 specifically states "small-scale renewable energy schemes utilising technologies such as solar panels, biomass heating, small-scale

wind turbines, photovoltaic cells and combined heat and power schemes can be incorporated in new developments as well as existing buildings. Local Planning Authorities should specifically encourage such schemes through positively expressed policies in local development documents."

VI. Design

Use

The purpose of the proposed PV array is to generate electricity and to: -

- Reduce the Isles of Scilly's energy consumption and carbon emissions.
- Reduce potential risks from future climate change particularly rising sea-levels.
- Contribute to Council's targets to increase renewable electricity capacity, which in turn assists the UK's obligation to reduce its greenhouse gas emissions.
- Assist in lowering dependence on the mainland link and the power station on St Mary's for back-up.

Amount

A single ground mounted array comprising 26 450W panels each 1762mm L x 1134mm W

Layout

The accompanying drawings indicate the proposed layout of the array and the site location.

Scale

The physical dimension of the proposed array is:

14982mm W x 2580mm

Installed in two rows 13x2 portrait alignment at 30° to the horizon.

Landscaping

No landscaping is proposed.

Appearance / Visual Impact

The PV array proposed is of a standard design and will be located in the meadow adjacent to the pool ancillary buildings. It will be visible from various aspects; however, it is felt that there are no significant visual impact issues.

VII. Access

It is not envisaged that the scale and nature of the traffic in the area will change as a result of installing the array.

Access by the general public will only be required if the pool emergency exit route is used.

Access to the meadow for maintenance will be required for occasional panel maintenance and regular mowing to enhance the wildflower mix and biodiversity of the site.



Ancillary building and pool viewed from the meadow.