Consultation on proposed changes to MCS Solar PV

Response from Wildlife & Countryside Link: July 2023

Wildlife and Countryside Link (Link) is the largest environmental coalition in England, bringing together 75 organisations to use their strong joint voice for the protection of nature.

This consultation response is also supported by Bat Conservation Trust and Buglife.

Introduction

As an environmental coalition we are support low-carbon energy technologies such as Solar PV to reduce our greenhouse gas emissions on the journey to Net Zero.

We also believe that these technologies must work in harmony with nature and wildlife.

Mentions of wildlife protection appear absent from MCS documents. Key issues around nesting birds and roosting bats in roof spaces during solar PV installations should be included.

Solar PV installations and wildlife

Within the Design and Installation requirements of the Solar PV Standards MIS 3002 , it states that 'all applicable legislation and directives must be met in full' but does not mention compliance with any relevant wildlife legislation, principally the Natural Environment and Rural Communities Act 2006 Sections 40 & 41[1] , the Wildlife and Countryside Act 1981 and Conservation of Habitats and Species Regulations 2017. [2]

Solar PV can particularly affect bat species. All species of British bat and their roosts are protected under British law by both domestic and international legislation, including the Wildlife and Countryside Act 1981 and Conservation of Habitats and Species Regulations 2017. There are 17 breeding bat species in the UK which equals a quarter of British mammals. Four of these breeding species are at risk of extinction. [3] Solar panels can have a significant effect on a bat roost by changing the temperature or roosting conditions for any bats beneath roof tiles, disturbing their roosting and blocking any access points to their roost. [4]

Wild birds, their nests and eggs are also vulnerable to damage from Solar PV. The activities surrounding installation of Solar PV panels, such as erecting scaffolding, can disrupt nesting birds like swifts who often build their nest under eaves of buildings.

Invertebrates can also be affected. Many species of aquatic invertebrate mistake the polarised light reflected from solar panels for open water, leading them to try and lay eggs on panels, which ultimately fail. This can be particularly important to consider where solar panels are being installed in close proximity to wetland habitats of importance for invertebrates. There are mitigation measures which can be taken that are low cost and do not impact on energy generation, such as including a pattern of

roughened or painted glass or a horizontal light blocking grid so that they are no longer attractive to aquatic invertebrates. The impacts of polarised light and mitigation approaches are discussed in 'A Review of the Impacts of Artificial Light on Invertebrates' report.

We recommend that the Design and Installation requirements of the Solar PV Standards MIS 3002 be expanded to include assessments of any wildlife activity, before work begins. Should such assessment reveal the presence of bats, nesting birds or aquatic invertebrates we would suggest incorporation of additional measures to minimise disruption, drawing on professional expertise. When contractors are advising customers on ways to maximise preservation of their solar panels, MIS 3002 section 5.8.2, they should suggest swift boxes, bat tiles and bat boxes as recommended additions.

Installation should also ideally take place outside spring, to avoid the breeding season and minimise the risk of wildlife disturbance.[5]

1. https://www.legislation.gov.uk/ukpga/2006/16/contents/enacted
2. https://www.legislation.gov.uk/ukpga/1981/69/section/1
   https://www.legislation.gov.uk/uksi/2017/1012/contents/made
3. https://www.bats.org.uk/about-bats
4. https://www.bats.org.uk/advice/im-working-on-a-building-with-bats/things-to-consider-when-planning-works/solar-panels
5. https://www.rspb.org.uk/globalassets/downloads/documents/positions/climate-change/solar-power-briefing---may-2017-update-revised.pdf

Conclusion

The consultation proposes a number of changes to MCS standards to improve Solar PV installation. If measures to protect wildlife, namely initial wildlife assessments and minimised disturbance, are included in these design standards, this will bolster the environmental benefits of solar technology.

14.07.23