I keep hearing about a standard for testing PV systems. Speaking to several other installers, some say that they follow it, others don't. What's the position?

The essential need for all installers of PV systems in the UK is to satisfy MCS requirements (for systems up to 50kW), as detailed in the DTI's guide Photovoltaics in Buildings. This is fundamentally aligned to the BS EN 62446:2009 standard for grid connected PV systems.

In short, this document sets out the minimum requirements for PV system documentation, commissioning tests, and inspection to ensure the safety and quality of system installation. The standard includes specific measures to ensure that:

- The PV panels and electrical supply connections have been wired up correctly
- That the electrical insulation is good
- The protective earth connection is as it should be
- There has been no damage to cables during installation

The standard describes various electrical tests to ensure that the solar installation fully complies with MCS requirements.

While many of the more reputable and discerning solar PV installers recognise the importance of testing to the standard, it is of serious concern that some installers are failing to perform the required tests, or at best only partly fulfilling this obligation.

Clearly where testing is not being carried out in accordance with BS EN 62446, the system will be in breach of MCS requirements and should not be eligible for feed in tariffs or be connected to the grid. This has potentially serious implications for the quality and safety of the solar PV installations in question.

For example, it was recently reported that a house fire in Kent was caused by a fault in a rooftop solar PV installation. This mirrors the situation in the USA, France and Australia where property fires and surveys of solar PV installations have raised specific concerns over incorrectly installed PV systems and their role as both a fire hazard and as a cause of increased risk of electrocution.

All involved in the solar PV industry need to take responsibility for the correct and proper installation of solar PV systems and the recent MCS/Gemserv consultation on the competency of solar PV installers seeks to address such concerns. The MCS is due to publish new guidance in the next few weeks which will further clarify the testing requirements for PV installations.

However, the solution lies in ensuring compliance with all relevant standards, including the solar PV testing and documentation requirements of BS EN62446. Only when this happens can the certification body be given the evidence that the work has been performed correctly and the customer given the assurance that absolute best practice has been followed in the installation of their PV system.

If you require more help, please contact us at https://www.seaward.com/us/enquire/.