

Residential Solar – LEI roof component inspection pilot

Protocol

Background

With the residential solar sector rapidly growing, licensed electrical inspector ('LEI') representative bodies, being the National Electrical and Communication Association (Vic) ('NECA') and the Institute of Electrical Inspectors ('IEI') have identified issues that have deterred LEIs from participating in the Solar Homes program.

Energy Safe Victoria ('ESV') is now aware of potential issues regarding the ability of the LEIs to carry out inspections safely, keep pace with the installation rate and ensure legislative obligations are met. LEI unwillingness to participate in the programme has led to NECA and the IEI proposing an alternative inspection program to be trialled across the Solar Homes initiative.

The proposed process and checklist are intended to provide LEIs with the appropriate tools and methods to undertake solar inspections safely while maintaining or improving compliance rates. This, as well as better technical information provided to LEIs by installers before undertaking the inspection, is expected to offer a more practical and efficient inspection methodology, and provide an effective feedback loop to inform installers of any defects identified. The proposed process is also intended to help electrical workers to ensure they are correctly testing and documenting the results of their tests in accordance with the relevant standards.

This approach is intended to provide LEIs with the assurance that electrical workers are meeting their obligations, so the LEIs can complete their inspections safely and deliver an independent and comprehensive verification that the solar systems are safe and compliant with all aspects of the relevant standards.

ESV, Solar Victoria ('SV'), WorkSafe Victoria, NECA and the IEI, have developed a checklist ('**the checklist**') and a process ('**the pilot process**') for LEIs to follow when performing solar homes installation inspections. *The checklist* and *the pilot process* will ensure inspections within the program will deliver a compliant outcome to the legislative requirements and that the inspections are carried out safely. ESV has agreed to the pilot proposal; the pilot will invite a select number of LEIs to participate subject to the conditions of the following protocol.

This protocol is to clearly outline the intent, process limitations, inclusions or exclusions relating to running the LEI solar inspection

Pilot governance

The pilot will be overseen by ESV and will run for 12 weeks and plans to include approximately five LEIs. The pilot will involve up to 2000 solar systems being installed as part of the Solar Homes program.

LEI participants will be selected by ESV in consultation with SV to ensure a diverse range of LEI skills and experience representing the LEI industry.

SV will produce data based on previous audits conducted by the participating LEI's to establish a base line data set, this data set will establish each LEI's individual compliance rate as a measure to demine the LEI's overall performance upon the completion of the pilot.

A selection of 100 COES's completed by the participating LEI's during the 12 week pilot period through the ESV Connect Systems will be selected and provided to SV for auditing and results compiled to represent individual LEI compliance rates.

NECA and IEI are responsible for educating the participants on the relevant documentation, the checklist, the pilot process, and other relevant procedures set out in this protocol. Additionally NECA and IEI are responsible for ensuring the participants are familiar with all WorkSafe Victoria requirements for working at heights and from ladders and having in place safe work procedures for all high-risk activities involved in the inspection process e.g. working on or near live parts.

Note: Participating LEI's upon completion of the pilot and all LEIs that are not part of the pilot must continue to conduct solar inspections to the current requirements, i.e. by accessing the roof to conduct detailed testing and inspection.

Scope of the pilot

- The pilot will involve five participating LEIs.
- The pilot will run for 12 weeks.
- Only participating LEIs are permitted to utilise the pilot process and can accept roof top isolation switches to be left in the 'on' position prior to their arrival (Legislation - *Electrical Safety Act 1998* – Section 45 (1))

The pilot will be restricted to solar installations that meet all of the following criteria:

- Residential Installations that are part of the Solar Homes program
- solar system installations on single storey buildings
- installations consisting of a single DC string arrangement, connected to a single maximum power point tracker (MPPT) inverter
- PV arrays incorporating a minimum of four earthing star-cutting washers at each panel and clamp connection.

Community engagement

ESV will develop and provide community correspondence in the form of a flyer. The flyer will provide information to property owners and occupiers regarding the installation of their solar system as part of the pilot and articulate:

- the nature of the pilot
- the installation may be subjected to additional auditing or inspection by SV auditors or ESV staff

Before the commencement of the inspection the LEIs must clearly articulate to the occupants that:

- their inspection is part of a pilot that will limit the need to access the roof component of the solar installation
- this alternative inspection (the pilot process) will not compromise safety and the outcome of the solar inspection
- the installation may be subject to an additional independent audit that will be carried out by SV
- ESV compliance officers may attend the site as part of a spot check/inspection or a general enquiry.

Pilot outcome

Upon completion of the pilot and audits a comparison against the initial compliance rate of each participating LEI will be established and assessed.

To succeed ESV expects that the audit data will identify an improved compliance rate (compared to the baseline) and no unsafe defects.

ESV remains committed to ensuring community safety. The pilot must demonstrate that no aspects of safety of electrical workers or the broader community safety have been compromised before it could consider implementing the pilot permanently.

ESV will publicly report its findings and position on the outcome of the pilot.

If you have any further questions regarding this matter please contact the Head of Electrical Installation Safety, Michael Miskulin by email Michael.Miskulin@energysafe.vic.gov.au or telephone (03) 9203 9745.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Leanne Hughson', written in a cursive style.

Leanne Hughson

CHIEF EXECUTIVE OFFICER