

# Institute of Electrical Inspectors

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### SOLAR INSTALLATIONS MAIN SWITCH

An additional main switch for a solar installation can be installed on an existing switchboard if that switchboard complied with the regulations that were in force when the switchboard was first installed.

The locking facilities requirements for main switches now only applies to the solar main switch (subject to further clarification by Standards Australia)

ESV Electrical Inspectors Guidance note December 2009

## PREMISES WITH CONSUMER ELECTRICITY GENERATION SYSTEMS Regulation 210

Premises where a consumer electricity generation system are installed or connected shall have clearly and permanently marked sign on all switchboards that will be energised by the consumer electricity generation system and any fire indicator panels, stating "Warning—this premises contains an electricity generation system" and the location of the of the isolation switch or switches.

ESV Electrical Inspectors Guidance note January 2010

#### SOLAR INSTALLATIONS.

### Isolation of dc supply at the photovoltaic arrays.

The DC solar supply requires an appropriately rated DC isolator at the commencement of the DC circuit this requirement complies with clause 1.5.2 and 7.3.4.1 of AS/NZS 3000:2007 and Clause 5.5 of AS 4777.1. It is important to have this isolating device installed so emergency services can isolate supply under emergency conditions.

#### Solar main switch -plug in circuit breakers.

Clause 5.3.3 of AS/NZS 4777.1 requires the main switch for the solar supply to be a lockable switch. Where solar energy systems are being installed and the installation has semi enclosed rewirable fuses the installation of a **plug in circuit** breaker **will not meet the requirements**.



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Solar main switch -domestic installations with multiple main switches.

In domestic installation where the protection devices for each final subcircuit is a main switch and a additional main switch for the solar energy systems is being installed the switchboard is required to be altered to comply with Clause 2.3.3.2 of AS/NZS 3000:2007 where only one main switch is allowed per supply and to conform with the connection method show in the AS/NZS 4777 series.

#### PREMISES WITH CONSUMER ELECTRICITY GENERATION SYSTEMS.

In premises where electrical generation systems are installed or connected **additional** signage is installed stating

## Warning

This premise contains an electricity generation system.

The isolation switch is located < location>

OR

## Warning

This premise contains an electricity generation systems.

The wind generation isolation switch is located <location>

The solar isolation switch is located <location>

This sign must be placed at fire indicator panel, main switchboard and all switchboards that will be energised by that consumers generating system.

The sign must be clear, durable and permanent and white lettering no smaller that 5mm on a dark green background to comply with AS 1319 emergency information signs. This sign does not replace the requirements AS/NZS 4777 or the electricity distributor's signage requirements.