



SAFETY CIRCULAR 13/2017

File: D03316

SEPTEMBER 2016

STAND ALONE ALTERNATE ENERGY SYSTEMS

At a recent operational incident involving a house fire at night, country crews responded to a premise that used an alternate energy source as its primary source of power. During overhaul, whilst removing ceiling insulation, a firefighter received an electric shock.

The property was in a rural setting, 800m from the road, not connected to mains power and therefore used a Stand Alone Alternate Energy System. A Photovoltaic system with a battery backup provided 100% of the electricity and the Solar Panels were located some distance away from and separate to the house.

A box containing the battery bank was adjacent to an external wall of the house in a covered timber and steel mesh cage. The Inverter was located in a storage cupboard within the house. There was no signage to indicate the position of the inverter and there was no traditional external power box to isolate power.

Critical Message

Responding crews must investigate and isolate electrical systems before commencing firefighting, rescue or storm damage operations.

Signage indicating the presence of a Stand Alone Alternative Energy System may not be present.



[SOP 3.4.8 – Electrical Hazards](#), highlights the steps that must be followed to isolate Alternate Energy Systems prior to firefighting operations.

[PowerPoint – Alternate Energy System](#) provides information regarding Grid Connected and Stand Alone Systems.

LLOYD BAILEY AFSM
DEPUTY COMMISSIONER OPERATIONS

Full links for staff extranet users and volunteers:

<https://extranet.dfes.wa.gov.au/sites/volunteers/members/SharedRepository/opsresources/Ops%20Resources%20%20SOPs%20Field%20Guides/SOP%203.4.8%20-%20Electrical%20Hazards.pdf>

<https://extranet.dfes.wa.gov.au/sites/volunteers/members/SharedRepository/opsresources/Ops%20Resources%20%20Equipment%20Resources/Alternative%20Energy%20Systems.pptx>

Target Audience: All operational personnel who may attend structural incidents.				
A	B	C	D	Vol
O.I.C. is to communicate content to all relevant personnel under their command, discuss implications, and sign appropriate box above. Once completed Circulars shall be filed on station and forwarded to Information Resources at the end of each financial year.				
SC-13-17	Issue Date:	Removal Date:	Contact:	Operational Readiness & Standards Capability Command
Page 1 of 1	SEP 2017	SEP 2018	Doctrine@dfes.wa.gov.au	