



PV Safety Webinar

Helping Ensure Safe PV System Installations

2-5pm, 18th February 2011 Nationwide Online Seminar

Australian PV Association: Developing a Professional PV Industry

In this Must-See Webinar, **Top Experts, all PV Industry Veterans** Share How You Can Best:

- <u>Avoid Loss of Ability to Create RECs</u>, helping you to maintain your successful business operation.
- Avoid Loss of Accreditation, helping you to keep your livelihood intact
- <u>Meet Forthcoming Standards</u>, helping you to cost-effectively ensure the safety of your PV installations
- <u>Pass Government Inspections</u>, helping you avoid litigation, fines, or imprisonment
- <u>Prevent House Fires, Wind-Damage, Loss-of-life</u> and other problems that can damage the reputation of <u>your business and your industry</u>

The Office of the Renewable Energy Regulator and the Commonwealth Department of Climate Change and Energy Efficiency have been coordinating a series of PV installation compliance inspections. These inspections will continue on through 2011. A number of recurring issues have been found, with a significant number of systems being disconnected from the grid until the problems are rectified.

In response, and to minimise future problems, the Australian PV Association (APVA), with assistance from the **CEC** and **SEIA**, is holding a **live webinar** specifically for installers of PV systems that will focus on the most common problems identified.









Topics and Speakers:

The following solar experts, standards committee representatives, and industry veterans will share their knowledge of key topics. The speakers' biographies are on the following pages. More details on what will be covered by each speaker will be placed on the APVA website: www.apva.org.au.

Breaker Wiring: Geoff Stapleton, GSES

- Isolators or Circuit Breakers: That is the question!
- DC circuit breakers in PV
- Wiring DC breakers to avoid fires

Earthing and Flood Safety: Ted Spooner, UNSW

- Why earthing matters
 - o Functional earthing
 - o Protective earthing
- Flood safety issues
- Prepare for these new requirements in Australian & International Standards

DC Breaker Ratings: Simon Franklin, IT Power

- Transformerless Australia Local Breaker Issues
- Avoid Catastrophic Failures: here's how

Cyclone Standards: Oliver Fitz-Henry, CAT Projects

- Legislative Considerations
- Design Considerations for Domestic Housing
- Practical Considerations

Format:

The presentations are web-based and can be viewed either 'live' or recorded. We will be using the Webex videoconferencing platform (<u>www.webex.com.au</u>). Participants will also receive a set of technical notes for each topic.

Live Webinar

Participants in the Live Webinar will hear and see the speaker as well as their slides. You will also be able to ask questions of the speaker. The Live Webinar will take place only between 2pm and 5pm on Fri 18th Feb 2011. Places are limited so please book early.

Recorded webinar

The webinar will also be available in a recorded format which can be viewed at any time from 21st February. Purchasers of the recorded webinar will receive the technical notes and have the opportunity to listen to others' questions and experts' responses, but won't be able to ask their own questions.









Registration and payment:

Costs:

Live webinar: \$165 incl. GST

Recorded: \$110 incl. GST

Registration:

1. Make a direct deposit payment (\$165 for the Live Webinar, or \$110 for the prerecorded replay) into the following account:

(make sure you include your name when you deposit your registration fee)
Reference: Company Name
Account Name: APVA
A/C: 294534
BSB: 032056

- 2. Then email Rob Passey [r.passey@unsw.edu.au] to register.
- **3.** You will then be provided with logon details for the live webinar or the download details for the recorded version.



Presenter Biographies

Geoff Stapleton





global sustainable energy solutions

Geoff Stapleton specialised in solar (PV) energy in the final year of his electrical engineering degree in 1981. He has worked in the industry since 1987 when he started as an engineer with BP Solar Australia. In 1989 he started his own design and installation company on the south coast of NSW. In the mid-1990's he

acted as a full time consultant for Integral Energy and in 1998 he formed Global Sustainable Energy Solutions Pty Ltd (GSES), a training and consultancy company. GSES is also a private RTO which develops resource books for the industry.

Geoff is a part time lecturer at UNSW. He has been active with the various industry associations since 1991 and is the current chair of the Clean Energy Council's Standards, Training and Accreditation Committee(STA). He also sits on Standards Australia RE committee and the Advisory Committee for EE-Oz (Electrotechnology Industry Training Advisory Body).

Ted Spooner



UNSW HE UNIVERSITY OF NEW SOUTH WALES SY DIN EY • AUSTRALIA BOODER IS A VISITING FOLLOW IN the School of Electrical

Ted Spooner is a Visiting Fellow in the School of Electrical Engineering and Telecommunications at the University of NSW. He has been involved in the renewable energy industry since the mid 1980s when he became involved in the testing and development of inverters for renewable energy systems. He has continued the

work with renewable energy systems and photovoltaics in particular through teaching and his work with standards.

He is currently chairman of Standards Australia EL42 Committee for development of standards for renewable energy (2004 onwards). He was interim chairman (2003-4) of the International Electrotechnical Commission (IEC) TC82 standards committee on photovoltaics and systems. He is currently the lead Australian delegate on IEC TC82(2000 onwards) and co-convenor of working group 3 "Systems" and member of working group 6 "Balance of system components".



Simon Franklin





Simon has worked on large and commercial scale grid-connected PV systems, hybrid off-grid power stations, financial modeling, PV market analysis and PV system performance modeling. Prior to joining IT Power he was an Electrical Engineer with Connell Wagner

during which time he undertook project management, electrical design and risk management work on a number of rail infrastructure and defense projects. Simon has also worked with the Cooperative Research Centre for Greenhouse Gas Technologies, investigating the feasibility of carbon capture and storage technologies.

Recent projects that Simon has completed include evaluation of tenders for large scale (30MW+) PV and solar thermal projects, high-level design and system performance modeling of large scale PV (30MW+) systems, development of financial models for commercial and large scale PV projects, development of technical specifications and tender documents for grid-connected PV systems, design and inspection review of grid-connected PV systems, project management of renewable energy installations.

Oliver Fitz-Henry





Oliver joined CAT Projects in Alice Springs in June 2010 as a Senior Project Manager and Structural Engineer. Formerly an Associate with Engineering consultancy, Arup Pty Ltd in its Darwin (2007-08) and Sydney (1987-2006) offices, he has more recently worked voluntarily on humanitarian development projects in Eastern Uganda, with Oasis Uganda, a national NGO.

He joined Arup as a structural engineer and has worked in the structural and façade

engineering fields, project and program management, as well as disaster relief and community development projects, with REDR Australia and other NGOs. Oliver has been involved in Arup's work in housing and health infrastructure in the NT and NSW, with Indigenous Australians since 2004.

Oliver has also had the opportunity to work overseas in countries as culturally and socially diverse as Hong Kong, Nepal, South Korea, Fiji, Kosovo, Indonesia, and The Maldives. The majority of this experience has included participation in and coordination of multi-disciplinary engineering and architectural teams and has included internal staff management and construction contract administration, procurement and overall project management.



About the APVA

The objective of the Australian PV Association is to encourage participation of Australian organisations in PV industry development, policy analysis, standards and accreditation, advocacy and collaborative research and development projects concerning photovoltaic solar electricity.

Information

APVA prepares Australia's annual PV report, as well as analyses and reports on a range of technical and policy related issues.

Networking

APVA holds regular technical seminars, courses and discussion sessions

Marketing Australian Products and Expertise

APVA members are routinely invited to participate in local and international trade delegations and PV events.

The International Energy Agency PV Power Systems Programme (PVPS)

The APVA manages Australian participation in the PVPS. This is facilitated by funding from the Australian Solar Institute.

- Task 1: PV Information Exchange and Dissemination
- Task 8: Very Large-Scale PV Systems
- Task 9: PV in Developing Regions
- Task 11: PV Hybrid Systems within Mini-grids
- Task 13: PV System Performance
- Task 14: High Penetration of PV in Electricity Grids

For further information on the Australian PV Association visit: <u>www.apva.org.au</u> For further information on the IEA-PVPS visit <u>www.iea-pvps.org</u>.