



Professional Development Day at

SEIA Qld Solar Installers' Annual Conference, 14 August 2015, Townsville Yachtclub	
Professional Development Day	
9.30-9.35	Welcome, Brian England, Chairman SEIA National
9.35-9.45	Project Introduction
9.45-9.55	Micro-inverters and remote monitoring
	A case study how the use of micro-inverters and remote monitoring benefits in a commercial application
	Florian Naumann, Qld Enphase Manager
	Based in Brisbane, Florian manages the on-boarding process of large installers in Queensland. He conducts sales training for key sales staff, as well as providing help with the technical, operational and marketing rollout that comes with transitioning to AC solar with Enphase. Florian also partners with installers in producing economic feasibility analyses of large-scale project.
9.55-10.05	Your Say
	A session to discuss and resolve specific industry issues such as technical, designing and marketing issues as well as product and installation issues. Any outstanding matters will be followed up by SEIA and reported back to attendees
10.05-10.55	New Battery Technologies - Lithium Iron
	Lithium-iron battery technology is the flavour of the month, but which of the many lithium iron technologies is best for our industry and what are the limitations and compromises. , Information on the technology used but also additional information that can allow system designers to size storage. Such as cycle life vs daily DoD, terminal voltage drop under various discharge profiles such as C10 and C20, ideal recharge profiles, etc . Question and Answer Session
	Steve Helleur, Product Manager, RF Industries
	Steve Helleur has been part of the Australian PV industry since 1989 in various sales and product roles. He was a member of the sales team at Solarex in the 90's (one of two Australian PV manufacturers back then), before moving to Canon to promote and sell their triple junction amorphous silicon technology, which was installed at Singleton solar farm (200kW) and on the Sydney Superdome (now Allphones Arena). For the past 13 years he has been with RFI and is the product manager responsible for off-grid and storage products. Question and Answer Session
10.55-11.25	Networking Session
11.25-12.05	Solutions for Export Limitation
	Solution for Export Limitation if the export is partial or if the export is complete, and whether there is storage involved. Case studies of various solutions will be provided. Question and Answer Session
	Ian Steinhardt, GNT Engineering P/L
	<i>Ian Steinhardt has been part of the GNT Engineering group since mid-2013 and has held responsibilities for the management of the business including the commercialisation of the Zero Export and Controlled export devices. He has worked with a variety of technology driven organisations having held responsibilities for domestic and international markets including Europe, Asia Pacific and the Americas. Ian holds a B.App. Science and Grad Dip in Marketing and Management.</i>
	Lindsay Hart, Sales Manager Australia/New Zealand, Selectronic



	<p>Apart from a 6 year stint heading up the inverter division for Solar Energy Australia, Lindsay Hart has been with Selectronic for his entire career since starting with the company in 1978 as an apprentice electronics tradesman. He has helped develop and successfully launch almost 100 different inverter models since 1981. Technical sales presentations and Training is the area that Lindsay most enjoys, trying to ensure that system design and installation is always of the highest quality. A lifetime in the inverter business, Lindsay has been living Off Grid since 1994. and is proud of his lifelong achievements so far in the industry and excited about what lies ahead.</p>
12.05-12.35	CER Audits and STC approvals
	<p>Addressing the issues of STC approvals on system upgrades with older inverters that are no longer listed but were approved at the time of installation. Audit results - how much is being audited, what are the results and are there specific offenders that the CER is targeting. What is the auditing program for the future? Question & Answer Session</p>
	Jessica Feeney, Team Leader, Crediting and Certification, Clean Energy Regulator
	<p>Jessica has been with the Clean Energy Regulator for 5 years and is responsible for managing the registration of Renewable Energy Target participants, assessing and validating small-scale technology certificates, assessing STC Clearing House buy orders and accepting the voluntary surrender of certificates. Jessica has experience administering the REE Act and Regulations and played a pivotal role in the implementation of the redesigned REC Registry for the small scale section.</p>
12.35-13.20	Networking
13.20-14.10	Micro Inverter & Micro MPPT Systems
	<p>The design of micro inverter systems to meet Queensland utility requirements, Customer advantages, voltage rise, trunk cable size, Q&A</p>
	Grant Behrendorff, Managing Director - AC Solar Warehouse
	<p><i>Grant is an Engineering Technologist, an electrician and a CEC accredited PV system designer and installer with several decades of experience in both the off grid and on grid sectors of the solar energy industry here in Australia and overseas. He has held leadership and senior management positions within the utility, not-for-profit and commercial sectors, and in recent years has been at the forefront of the adoption of AC Solar technology in Australia. Grant is the Managing Director of AC Solar Warehouse, a wholesaler that specialises in assisting solar retailers and installers in Australia and New Zealand to understand and take advantage of AC Solar technology to grow their businesses.</i></p>
14.10-14.40	Industry Snapshot and Directions
	<p>Where is our industry headed as we enter a new era of game changing technologies and products being released. What changes will businesses need to take to meet the future needs of solar consumers and what new markets are likely to be opening up in the short to medium future. Question & Answer Session</p>
	Nigel Morris, Managing Director, Solar Business Services
	<p>Nigel Morris has been involved solar energy for more than 20 years and is the founder of SolarBusinessServices. He has worked for small solar companies as an installer, designer and salesman. He has worked for International solar manufacturers in a variety of senior sales and business development positions. Five years ago, Nigel founded SolarBusinessServices, an award winning and</p>



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highly respected solar consultancy. The company provides business coaching for small solar company's, advises some of the world's largest solar corporations on strategy and conducts leading research for industry and Government. Nigel is a prolific blogger and an enthusiastic advocate for the solar industry.

14.40-15.10	Battery Technology - Lead acid
	Discussion on different technologies: Flooded & VRLA(AGM & GEL), cyclic & standby, flat & tubular plate & different grid alloys. Understanding basic chemistry, specific gravity and modes of failure, and cycle life graphs – they're not all the same
	Andrew Simpson, Technical Sales – Batteries & Solar QLD, M Power
	Andrew started his career in 1983 as an apprentice electrician with the Royal Australian Navy's Torpedo Maintenance Establishment where also complete and Associate Diploma in Electronics. He then moved to SAFT NIFE – Field service to industrial batteries and component level repairs to power electronics, where I got his first taste for solar working on the Optus cross Nullarbor link. He was a R&D tech developing a micro Inverter with Pacific Solar, BP Solar, Solco and now MPower.
15.10-15.40	Networking/Exhibition
15.40-16.10	Network Issues for PV Installation
	VR (voltage rise) - total or partial limitation is possible to meet network requirements and the solutions will vary depending on whether the system has battery storage. PF (power factor) - if the network is requiring PF correction the solution can be found in correcting the loads independent of the inverter used, or specifying inverters with specific leading/lagging PF to solve the problem. Peak Loading - the afternoon peak has now become the late afternoon/early evening peak due to solar penetration. Is a TOE (time of export) meter a solution to encourage customers to install panels on westerly roofs and be compensated for the performance reduction by a higher FIT for that time. Is there an opportunity to allow export from batteries managed by a ripple control system similar to OP? Peer-to-Peer exporting - does the network have the capacity and the technology to act as a broker for use of the grid to have power sold from one consumer to another? Question and Answer Session
	Don McPhail, Ergon
	Donald McPhail (BE, CPEng, RPEQ), is the Network Strategy and Policy Engineer with Ergon Energy. Within this role, Donald has been responsible for the development and implementation of Ergon Energy's connection standards, strategies and policies for distributed energy resources - including Solar PV, Battery Energy Storage, Electric Vehicles and microgrids. The focus of this work has been to facilitate Ergon Energy's vision to become a market enabler, in an increasingly dynamic industry. From 2011 to 2013 Donald was an E.S. Cornwall Scholar which led him overseas to gain exposure to international developments in the integration of distributed energy resources and electric vehicle charging infrastructure. Donald is a steering committee member of the Australian Energy Storage Alliance.
16.10-16.20	Open Forum
	Follow-up on any outstanding issues from the morning session Question and Answer Session
16.20-16.30	Thank you, close, Certificates