

# SEMINARS

WEDNESDAY, FEBRUARY 29<sup>TH</sup>

## 9:30 - 10:30 - Solectria: Commercial Solar Inverter Training\*

Solectria Renewables' PVI inverters ranging from 60-95 kW are the most widely used three-phase commercial inverters in the industry. This commercial training will review the PVI 60/82/95KW inverters including design & features; the easy of mounting and installation; AC/DC electrical connections; string sizing and installation site examples. We will also discuss communications via SolrenView web-based monitoring.

## 9:30 - 10:30 - Outback: Off Grid/ Grid Tied System Solutions - Part I\*

Application Engineer, Lones Tuss will discuss a battery based systems approach to energy solutions. Topics will range from single to large multi-inverter systems with an introduction to Outback's latest offering the GS 8048 inverter and Integrated Battery Rack.

## 9:30 - 10:30 - altE: Solar Space Heating in the North - A Case Study

Amy Beaudet's house in Massachusetts house was built in the 1960s and has electric baseboard heaters. At \$0.15 a kWh, this was not the affordable heating solution it was 40 years ago. So she added both solar air heating and solar water heating to the house, providing up to half of the heat with solar. This session will review the basics of space heating design and review data from the systems.

## 10:45 - 11:45 - Kyocera - PV Business Development and Project Financing

An introductory look at the different ways homeowners and business' finance solar electric systems including cash, loans, leases and power purchases agreements. We will look at strategies for how your company can take advantage of these types of finance options to help grow your business opportunities.

## 10:45 - 11:45 - Outback: Off Grid/ Grid Tied System Solutions - Part I\*

Application Engineer, Lones Tuss will discuss a battery based systems approach to energy solutions. Topics will range from single to large multi-inverter systems with an introduction to Outback's latest offering the GS 8048 inverter and Integrated Battery Rack.

## 10:45 - 11:45 - IronRidge: Roof & Ground Mount Systems

### Including New Ballasted Mount System & Design Assistant

A review of IronRidge's existing roof and ground mount systems with a focus on the benefits of our rails longer spans between attachment points which leads to reduced total cost of installation. Also an introduction to IronRidge's new ballasted product which is revolutionary in its ease of installation, simplicity and low weight on the roof and our Design Assistant software.

## 1:45 - 2:45 - Burndy: WEEBs - Bonding & Grounding Solutions

A deep dive, technical discussion and interactive experience with proper installation of WEEBs, WEEB Lugs and WEEB Bonding Jumpers for compliance with NEC requirements. Product samples are handed out and various racking/module frame assemblies are passed around for an up-close inspection and better understanding of how the WEEB teeth are able to bond the module frames to the racking system... which allows for a huge time savings at the job site and even larger cost savings by using less copper conductor than the traditional method of lay-in lugs.

## 1:45 - 2:45 - DPW Solar: Don't Forget About the Racking

DPW Solar will be presenting different racking options for site specific applications while discussing factors affecting product design. Discover time saving installation methods and tools for specifying the best mounting solution for your residential or commercial PV solar projects.

## 1:45 - 2:45 - altE: Grid-tied String Sizing Basics\*

Take the mystery out of PV array string sizing and learn how to determine the appropriate number of PV modules to wire together in series to achieve maximum compatibility with a given grid-tied inverter. We will show how to do these calculations manually for those situations when online tools and resources are not available.

### NABCEP EDUCATIONAL CREDITS

Seminars marked with an \* throughout this program guide count as one hour of NABCEP Continuing Education Credits.



*making renewable do-able...*



# INSTALLER CONFERENCE 2012 PROGRAM GUIDE



# AGENDA

# SEMINARS

## TUESDAY, FEBRUARY 28<sup>TH</sup>

7:30 - 9:00	Registration		
8:00 - 9:00	Coffee, Continental Breakfast in Exhibit & Tradeshow Area		
9:00 - 9:30	Welcome In Tradeshow Area		
	<b>WHITE MOUNTAIN ROOM</b>	<b>MAIN DINING ROOM</b>	<b>TRUE GRIT ROOM</b>
9:30 - 10:30	Fronius USA is offering training for PV professionals on Fronius inverters and DATCOM systems	Kyocera: An in-depth look at KYOCERA product bankability, quality and reliability	MK Battery: Utilizing DEKA Solar UNIGY II Battery Systems in Grid-Tie Battery Backup Applications*
10:30 - 10:45	Break		
10:45 - 11:45	Nine Fasteners: Solar Wire Management Clip Overview	Schneider Electric: Grid-Tie & Battery-Based Training - Part I*	Eolibrium Solar: Commercial Mounting System Training
11:45 - 12:00	Break		
12:00 - 1:00	AET: Commercial Solar Heating	Schneider: Grid-Tie & Battery-Based Training - Part II*	Trojan Battery: Battery Fundamentals for Photovoltaic Systems*
1:00 - 2:30	Networking Lunch in Exhibit & Tradeshow Area		
2:30 - 3:30	Quick Mount PV: Solar Roofing Best Practices*	Midnite Solar's Classic MPPT Charge Controller and Clipper	Solectria: Residential Solar Inverter Training*
3:30 - 3:45	Break		
3:45 - 4:45	Trojan Battery: Flooded Lead Acid Battery Equalization Clinic*	Schletter: Flush Mount Systems: Design & Product Applications*	Schott Solar: Welcome to SCHOTT Solar: Your long term partner for high quality and bankable PV solutions
5:00 - 7:00	Reception in Tradeshow Area		

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9:30 - 10:30	Solectria: Commercial Solar Inverter Training*	Outback Power: Off Grid/ Grid Tied System Solutions - Part I*	altE: Solar Space Heating in the North - A Case Study
10:30 - 10:45	Break		
10:45 - 11:45	Kyocera - PV Business Development and Project Financing	Outback: Off Grid/ Grid Tied System Solutions - Part II*	IronRidge: Roof & Ground Mounts Systems Including New Ballasted Mount System & Design Assistant
12:00 - 1:30	Networking Lunch in Exhibit & Tradeshow Area		
1:45 - 2:45	Burndy: WEEBs - Bonding & Grounding Solutions*	DPW Solar: Don't Forget About the Racking	altE: Grid-tied String Sizing Basics
3:00	Event Closes		

Cover Photo Credit: Out Island Energy

## TUESDAY, FEBRUARY 28<sup>TH</sup>

9:30 - 10:30 - Fronius USA is offering training for PV professionals on Fronius inverters and DATCOM systems	2:30 - 3:30 - Quick Mount PV: Solar Roofing Best Practices*
This course is designed for technical sales professionals, installers and PV system designers. We will cover various topics to include complete Fronius product overview, Fronius inverter technology, system design, best practices in installation procedures, product features and benefits and highlights of Fronius DATCOM system options.	Roof penetrations are potentially a tremendous liability for solar installers. We will discuss how to follow important roofing best practices to maintain roof warranties, protect the roof, and reduce installer liability. Various mounting and flashing methods for common roof types such as composition asphalt, tile, metal, and wood shake will be covered. The session covers all Quick Mount PV products, with an emphasis on our mounts for residential roofs.
9:30 - 10:30 - Kyocera: An in-depth look at KYOCERA product bankability, quality and reliability	2:30 - 3:30 - Midnite Solar's Classic MPPT Charge Controller and Clipper
9:30 - 10:30 - MK Battery: Utilizing DEKA Solar UNIGY II Battery Systems in Grid-Tie Battery Backup Applications*	2:30 - 3:30 - Solectria: Residential Solar Inverter Training*
The DEKA Solar UNIGY II Line is a modular approach to building custom battery banks utilizing AGM, high capacity 2-volt cells. This modular design reduces the footprint required for the capacity supplied as well as eliminates the need for battery racks. This class will focus on the benefits and sizing requirements of a UNIGY II Battery bank in a grid-tie battery backup application.	Interested in learning about single phase systems and inverters? This training will be an in depth training on the Solectria Renewables PVI 1800 through PVI 7500 single-phase residential and small commercial grid-tied PV inverters. This training includes installation details, string sizing, temperature effects on PV array voltages, AC/DC connections, wiring needs, data monitoring, available options and how to use the inverters in parallel for single-phase PV installations ranging from 1.8kW and above.
10:45 - 11:45 - Nine Fasteners: Solar Wire Management Clip Overview	3:45 - 4:45 - Trojan Battery: Flooded Lead Acid Battery Equalization Clinic*
Nine Fasteners is altE's made in the USA supplier of solar wire management clips. We have unique designs for use on both rails and modules, great prices, and flexible order scheduling. Let us demonstrate why our products are being used by some of the solar industry's biggest names. As an added bonus, we are really nice people!	A hands-on, step by step primer on equalization of flooded deep cycle lead-acid batteries. Learn how to safely take accurate specific gravity readings and how to interpret them in order to get the most long term value out of your battery bank.
10:45 - 11:45 - Schneider: Grid-Tie & Battery-Based Training - Part I*	3:45 - 4:45 - Schletter: Flush Mount Systems: Design & Product Applications*
In this class you will receive an in-depth training on the new Schneider Electric Conext TX single phase grid-tie inverters with a specific focus on the new Shade Tolerant MPPT algorithm. This class will also cover the new MPPT 80 600 VOC charge controller and an overview of the XW battery based system including AC coupling.	This session addresses the design aspects and product applications of the ever-increasingly popular flush mount PV roof top system. This session qualifies for one hour of NABCEP continuing education credit.
10:45 - 11:45 - Eolibrium Solar: Commercial Mounting System Training	3:45 - 4:45 - Schott Solar: Welcome to SCHOTT Solar: Your long term partner for high quality and bankable PV solutions
Increase your competitive edge in the commercial segment with a streamlined mounting system. Training will cover the installation method of the Ecofoot mounting system. This class will also discuss the benefits of the innovative system to all departments in your company.	Schott Solar, PV Inc. is a vertically integrated PV solutions company that has been producing industry leading high quality solar modules for over 53 years. We are also very proud to produce our modules for the US market in Albuquerque, NM. In this session we look forward to introducing you to our company and explaining how a truly high quality bankable module can help maximize your energy yield and therefore improve your project's ROI.
12:00 - 1:00 - AET: Commercial Solar Heating	
12:00 - 1:00 - Schneider: Grid-Tie & Battery-Based Training - Part II*	
In this class you will receive an in-depth training on the new Schneider Electric Conext TX single phase grid-tie inverters with a specific focus on the new Shade Tolerant MPPT algorithm. This class will also cover the new MPPT 80 600 VOC charge controller and an overview of the XW battery based system including AC coupling.	
12:00 - 1:00 - Trojan Battery: Battery Fundamentals for Photovoltaic Systems*	
An introduction to lead-acid battery technology for off-grid and grid-tied with battery backup PV systems. Learn the key differences between flooded, Gel and AGM batteries and develop a broader understanding of how to properly select, install and maintain lead acid batteries in a renewable energy system. Qualifies for NABCEP Continuing Education credit.	

**SEMINAR PRESENTATION MATERIALS**  
Copies of the materials presented at all breakout seminars will be made available for download on our website approximately one week after the conference. A login and password will be emailed to you after the conference.