

## Business Track - Room 101B

### **PUBLIC RELATIONS AS A SALES & MARKETING TOOL**

**Wednesday, May 13, from 8:30 AM - 10:30 AM**

Renewable energy, green jobs, combatting climate change - just a few of the buzzwords journalists are seeking to highlight in their stories these days. As a solar installer, you and your customers have great stories to tell. When done well, earned media can help you establish credibility and brand awareness among your target customer audience, build long-term relationships with key local media and provide high-impact, low-cost alternatives to traditional advertising strategies. Learn who to target and how to find them, what makes an effective news hook, how to pitch to the media and which PR tools in print, electronic and online media you can exploit to meet your media objectives.

*Presenters: Terri Steele, Conergy Communications Strategist & Jyl Safier, Conergy Director, Marketing*

**Applications:** Residential Grid-Tie, Commercial & Battery Based & Off-Grid

### **CONERGY-CPF TOOLS - MANAGE CUSTOMERS & DELIVER FAST ACCURATE SOLAR PV QUOTES**

**Wednesday, May 13, from 10:30 AM - 12:30 PM**

Running a solar business involves more than technical 'know-how'. Crafting a successful sales process, understanding calculations on 'Return on Investment', and navigating the complexities of various utility rate structures will help differentiate you from your competition and give you a competitive edge in this growing and dynamic industry. Topics will include, but are not limited to: Strategic lead generation and tracking, Creating clear, accurate and compelling reports, Calculating and explaining financial & non-financial motivations, Navigating and explaining utility rates, tariffs, incentives & rebates. *Presenter: Jeremy Hammond, Sales Manager, CleanPower Finance*

**Products Covered:** CPF Tools, Conergy Edition

**Applications:** Residential Grid-Tie, Commercial & Battery Based & Off-Grid

### **BIG MARKETING IMPACT ON A SMALL BUSINESS BUDGET**

**Wednesday, May 13, from 1:30 PM - 3:30 PM**

This fast-paced, interactive class is an MBA in Marketing boiled down to a 2-hour course focused on positioning your business in the high-growth and increasingly competitive solar energy market. Thought-provoking, strategic, relevant - this course is designed to help you understand how to actively, efficiently and cost-effectively take control of the essentials of a marketing plan including: customer analysis, lead management, brand-building and differentiating yourself from your competitors. *Presenters: Jyl Safier, Conergy Director, Marketing*

**Applications:** Residential Grid-Tie, Commercial & Battery Based & Off-Grid

### **ECONOMICS OF PV OVERVIEW FOR SELLING TO THE RESIDENTIAL GRID-TIED MARKET**

**Wednesday, May 13, from 4:00 PM - 6:00 PM**

This introductory class is to help dealers, installers, and salespeople get started make the best and most accurate financial case to their customers to help them make more sales and open more eyes to the value of solar systems. Andy will discuss the various methods of performing financial analyses in conjunction with the savings realized and the major factors that affect the results, such as rates, incentives, and tax benefits. Financial analysis methods presented will include Simple Payback, Total Lifecycle Payback, Internal Rate of Return (IRR), Cash Flow analysis, and Appraisal Resale Value. Interactive examples of residential sites will be provided, including discussion of the salient differences and advantages of each method. The OnGrid Tool will be presented, which helps users do the above financial analysis, and present the results to customers in clean, easy to use auto-generated proposals. All students will receive a demo of the OnGrid Tool. *Presenter: Andy Black, President, OnGrid Solar*

**Applications:** Residential Grid-Tie

### **BRAND BUILDING, LEAD GENERATION AND CUSTOMER EDUCATION THROUGH THE ASES NATIONAL SOLAR TOUR**

**Thursday, May 14, from 8:30 AM - 10:30 AM**

Last year's National Solar Tour attendance exceeded 140,000 visitors, touring over 5,000 buildings in 3,000 participating communities. A majority of attendees were specifically gathering information on how to incorporate solar energy in their homes. This training session will provide specific examples and guidelines on how to organize and promote a tour in your area in order to help generate leads and promote sales. *Presenters: Richard Burns, ASES National Solar Tour Manager & Terri Steele, Conergy Communications Strategist*

**Applications:** Residential Grid-Tie, Commercial & Battery Based & Off-Grid

# Course Descriptions

## **SIZING UP – MID-SCALE COMMERCIAL PV SYSTEMS**

**Thursday, May 14, from 10:30 AM - 12:30 PM**

Geared towards existing residential-scale PV installers interested in Commercial-scale PV installation, this 2 hour presentation provides a technical overview of mid-scale (30 – 500 kW) PV systems. Topics include choosing inverter(s), DC and AC wiring configurations, utility interconnection, mounting systems, and general installation strategies.

*Presenter: Dan Rice, Conergy Applications Engineer, Key Accounts*

**Applications:** Commercial

## **CONERGY COMMERCIAL FINANCING PROGRAM SELLING STRATEGIES**

**Thursday, May 14, from 1:30 PM - 3:30 PM**

This session will provide an overview of the program's features and benefits and provide valuable information about using finance as a selling tool in commercial and government markets. The session will also feature cash flow examples and Q&A. *Presenter: Matt Kyriakos, Conergy Director Key Accounts*

**Applications:** Commercial

## **BAKING UP A SOLAR MARKET: MARKET RESEARCH INSIGHTS & INDUSTRY OUTLOOK**

**Thursday, May 14, from 4:00 PM - 6:00 PM**

Attend this session to learn about the ingredients that make an effective solar market. Start with a base layer of a renewable portfolio standard or renewable energy program that includes a healthy solar or distributed generation carve out. Add incentives that create demand for solar. Make sure you have plenty of funding. Stir in friendly energy rates that recognize the value of solar generation. Mix in streamlined net metering and interconnection regulation that allows large systems to connect to the grid. Bring lots of cooks into the kitchen and bake as fast as you can. We'll also take a tour of supply, demand and technologies. *Presenter: Donald Chung, Conergy Managing Director, Distribution*

**Applications:** Residential Grid-Tie, Commercial & Battery Based & Off-Grid

## **Potluck Track - Room 101F**

### **FRONIUS INVERTER AND DATCOM TRAINING**

**Wednesday, May 13, from 8:30 AM - 12:30 PM & Thursday, May 14, 2009 from 8:30 AM - 12:30 PM**

Fronius is offering a half day course (4 hour) that will cover various topics to include Fronius inverter technology, data communications, installation procedures, trouble shooting, system design and more. Attendees will also receive a workbook and a certificate of completion. In addition, the class has been certified for continuing education credit from the National Association of Board-Certified Energy Practitioners. (NABCEP) *Presenter: Tim McKernan, Sales Application Engineer, Fronius USA, LLC*

**Products Covered:** Fronius IG plus inverters

**Applications:** Residential Grid-Tie & Commercial

### **NEC CODE-COMPLIANT GRID-TIE PV SYSTEM DESIGN & INSTALLATION**

**Wednesday, May 13, from 8:30 AM - 12:30 PM**

The purpose of this workshop, taught by Bill Brooks, is to help the audience better understand the NEC requirements for designing and installing PV systems. The workshop is designed for PV installers, electrical contractors, designers, engineers, architects, building inspectors, plan checkers and fire officials who wish to stay on top of the latest code compliance issues that help facilitate safe and long-lasting PV systems. Participants will be provided with an intensive overview of the codes and standards that govern small-scale solar electrical generation. Primary focus is on the National Electrical Code (NEC), with a permit and inspection guideline provided to organize the process. (NABCEP) *Presenter: Bill Brooks, President, Brooks Engineering*

**Applications:** Residential Grid-Tie & Commercial

### **WILEY GROUNDING APPLICATION FOR COMMERCIAL AND RESIDENTIAL INSTALLATIONS**

**Wednesday, May 13, from 1:30 PM - 3:30 PM**

Join us for an introduction to innovative balance of system products for PV installers. Wiley Electronics' engineers will demonstrate industry-accepted products – the WEEB Grounding Clip and WEEB Lug – designed to make your installations easier, safer, and less expensive. We will also look at improved wiring methods using the Acme Conduit Entry (ACE) and Acme Cable Clips, and a digital PV site evaluation using the ASSET tool and software. (NABCEP) *Presenters: Heather Peterson, Sales Manager & Brian Wiley, Electrical Engineer, Wiley Electronics*

**Applications:** Residential Grid-Tie, Commercial & Battery Based & Off-Grid

### SANYO HIT POWER N SERIES AND HIT DOUBLE SERIES TECHNOLOGY

**Wednesday, May 13, from 4:00 PM - 6:00 PM from & Thursday, May 14, 2009 from 1:30 PM - 3:30 PM**

The new HIT Power N Series features the latest technological improvements including higher module output, lower voltage, space savings and lower installation costs that making them the most efficient and competitive cost per kWh panels in the solar market today. HIT® solar cells developed by SANYO are hybrid solar cells composed of single crystalline silicon wafers surrounded by ultrathin amorphous silicon layers. The unique structure produces highly efficient cells capable of achieving up to 17.1% module efficiency while producing more power at higher temperatures. Using HIT Power® N Series solar panels allows maximum power generation per square foot, reducing the number of panels needed. The improved technology features a higher output range (205 - 215W) and lower voltage (Vpm: 40.7-42.0V) – which means up to 60% more capacity per string and fewer parallel connections, cutting total installation costs. *Presenter: Rob Zerner, Solar Market Specialist, SANYO Energy (USA) Corporation*

**Products Covered:** SANYO HIT Power N, SANYO HIT Double

**Applications:** Residential Grid-Tie & Commercial

### S-5! SOLAR ATTACHMENT SOLUTION FOR METAL ROOFS

**Thursday, May 14, from 4:00 PM - 6:00 PM**

Solar Installation For Metal Roofs, The Right Way with S-5! The perfect surface for roof top solar system is metal. In this course you will: The benefits of attaching Solar Panels to a metal roof, the risk and pitfalls when attaching solar panels to a metal roof, how to plan a proper installation, best practice techniques for a successful installation, benefits of a direct attach system, attaching solar panels to a face fastened roof system, the recommended installation process, determining the frequency of attachment, and other installation tips and guidelines.

*Presenter: Keith Lipps, Training Manager, S-5!*

**Products Covered:** S-5 Clamps, s-5 PV Kits

**Applications:** Residential Grid-Tie & Commercial

## Inverter Track - Room 101G

### FRONIUS INVERTER AND DATCOM TRAINING

**Wednesday, May 13, from 8:30 AM - 12:30 PM & Thursday, May 14, 2009 from 8:30 AM - 12:30 PM**

Fronius is offering a half day course (4 hour) that will cover various topics to include Fronius inverter technology, data communications, installation procedures, trouble shooting, system design and more. Attendees will also receive a workbook and a certificate of completion. In addition, the class has been certified for continuing education credit from the National Association of Board-Certified Energy Practitioners. (NABCEP) *Presenter: Tim McKernan, Sales Application Engineer, Fronius USA, LLC*

**Products Covered:** Fronius IG plus inverters

**Applications:** Residential Grid-Tie & Commercial

### XANTREX GRID TIE PRODUCT - RESIDENTIAL & SMALL COMMERCIAL APPLICATIONS

**Wednesday, May 13, from 1:30 PM - 6:00 PM**

Installers and dealers can gain an understanding of the GT –Series product line and how to install it. This session reviews features of the GT installation, performance, and performance monitoring, how to plan the installation, voltage and sizing requirements, array sizing, grounding and disconnects. This session reviews proper install of the Xantrex GT series product for a PV System installation. (NABCEP) *Presenter: Jarmo Venalainen, Technical Training Engineer, Xantrex Technology Inc.*

**Products Covered:** GT Series - 2.8kW-5kW, GT30, GT100 - 250

**Applications:** Residential, Small Commercial Grid-Tie

### INTRODUCTION TO SMA PRODUCTS

**Thursday, May 14, from 8:30 AM - 12:30 PM and 1:30 PM - 6:00 PM**

Introduction to grid interactive inverters for residential and small commercial applications. General overview of bidirectional commercial utility scale inverters. *Presenter: Antonio Gomez, Training Manager, SMA*

**Products Covered:** All SMA Products

**Applications:** Residential Grid-Tie, Commercial & Battery-Based & Off-Grid Applications

# Course Descriptions

## Mounting Systems Track - Room 101C

### CONERGY SOLARGIANT - COMMERCIAL-SCALE MOUNTING SYSTEM SOLUTIONS

**Wednesday, May 13, from 1:30 PM - 6:00 PM**

An introduction and detailed overview of Conergy's revolutionary new SolarGiant III PV ground mount system. To demonstrate the SolarGiant's unique features and the ease and speed of assembly, a 5KW SolarGiant III will actually be assembled and erected in the session. (NABCEP) *Presenters: Don Massa, Product Manager, Mounting Systems & Dan Rice, Applications Engineer, Key Accounts, Conergy*

**Products Covered:** Conergy SolarGiant

**Applications:** Commercial

### CONERGY SUNTOP PITCHED-ROOM MOUNTING SYSTEM + QUICK MOUNT CODE-COMPLIANT MOUNTING & WATERPROOF FLASHING

**Thursday, May 14, from 8:30 AM - 12:30 PM**

An introduction and overview of Conergy's SunTop pitched roof mounting system in conjunction with Quick Mount PV's code compliant flashings for roof penetrations. Emphasis will be placed on code compliance and best practices for roof installed systems, demonstrating SunTop's ease and speed of assembly together with Quick Mount's simple installation process. A live demonstration of Quick Mounts and the SunTop code-compliant sizing tool will also be provided. (NABCEP) *Presenters: Don Massa, Product Manager, Mounting Systems, Conergy & Johan Alfsen, Dealer Trainer & Sales, QuickMount PV*

**Products Covered:** Conergy SunTop and Quick Mount PV

**Applications:** Residential Grid-Tie

### UNIRAC RAPIDRAC - PV'S FLAT ROOF SOLUTION FOR COMMERCIAL INSTALLATIONS

**Wednesday, May 13, from 8:30 AM - 10:30 PM**

Unirac's new universal flat roof solution accommodates a wide range of modules, providing customers with flexibility & options. Minimal parts, faster installation, reduced labor expenses and versatility; all customer-driven demands that helped engineer this unique flat roof solution.

*Presenters: Greg Barnes, Project Manager Unirac*

**Products Covered:** Unirac RapidRac

**Applications:** Commercial

### UNIRAC CLICKSYS - DELIVERING VALUE THROUGH INNOVATION

**Wednesday, May 13, from 10:30 AM - 12:30 PM and Thursday, May 14, from 1:30 PM - 3:30 PM**

CLICKSYS' innovative design provides the most cost effective, fastest and easiest to install flush mount solution with the greatest value in the residential marketplace. Designed for flush roof, mounting applications, CLICKSYS offers superior aesthetics with great value and is easily installed on most roofing types, including barrel and Spanish tiles.

*Presenters: Greg Barnes, Project Manager Unirac*

**Products Covered:** Unirac Clicksys

**Applications:** Residential Grid-Tie

### DPW POWERTUBE CRS FLAT ROOF SOLUTION

**Thursday, May 14, from 4:00 PM - 6:00 PM**

DPW Solar will provide a 2-hour hands-on training course focusing on its residential and commercial PV mounting solutions, including the lightweight Power Beam CRS Commercial Racking System for flat roofs, Ballasted Roof Mounts (BRM) and Power Rail top-clamping mounting system. Other products discussed include top-of-pole mounts and enclosures. Participants will receive a compete product binder or CD for all the DPW Solar mounting products.,

*Presented By: Nate Randall, Director of Sales Direct Power & Water*

**Products Covered:** Power Beam CRS Commercial Racking System for flat roofs, Ballasted Roof Mounts (BRM) and Power Rail top-clamping mounting system

**Applications:** Residential Grid-Tie & Commercial Applications

## Off-Grid / Battery-Based Track - Room 101D

### OUTBACK POWER SYSTEMS PRODUCT OVERVIEW AND SYSTEM DESIGN

**Wednesday from 8:30 AM - 12:30 PM**

Introduction to OutBack Power Systems products and applications. (NABCEP) *Presenter: Roy Dyngen, Sales Manager, Outback Power Systems*

**Products Covered:** FX Series Inverter/Charger, FLEXmax Series MPPT Charge Controllers, FLEXware Integration Hardware, FLEXnet DC System Monitor, SmartRE Fully Integrated Grid-Interactive Solution

**Applications:** Residential Grid-Tie, Battery-Based & Off-Grid

### FLOODED LEAD ACID BATTERIES - ROLLS BATTERY ENGINEERING

**Wednesday from 1:30 PM - 3:30 PM**

The intention of this technically focused discussion is to bring a clear understanding to the workings of the lead-acid battery. We will begin with a short video depicting modern battery production processes in an attempt to clarify associated industry jargon. The presentation will focus on diagnosis and troubleshooting techniques involving performance issues, temperature effects, charging parameters, sulfation and maintenance considerations, our product line overview, sizing recommendations and method of bringing product to the market. (NABCEP) *Presenters: James Surrette, President & Pat Friesen, Sales Manager, Surrette Batteries*

**Products Covered:** Lead-Acid Batteries

**Applications:** Battery-Based & Off-Grid

### CONERGY SOLAR WATER PUMPING SOLUTIONS – REAL WORLD DESIGN AND APPLICATIONS

**Wednesday from 4:00 PM - 6:00 PM**

Water is an essential need – join us as we provide options for meeting this need. We will compare existing solar pumping technologies, and discuss ways of achieving your client’s needs within their budget, with an emphasis on reliable, economical solutions. We will show how to avoid common mistakes and pitfalls, and how to install systems which will provide years of reliable service. *Presenter: Phil Undercuffler, Off-Grid & Battery- Based Applications Director, Conergy*

**Products Covered:** Conergy Water Pumps

**Applications:** Battery-Based & Off-Grid

### MAGNUM ENERGY PRODUCTS AND APPLICATIONS

**Thursday from 8:30 AM - 10:30 AM**

Selecting the right Magnum Energy product for Off grid and Backup power applications. Installation of the new MP Magnum ac/dc breaker panel system. troubleshooting inverters, remotes and AGS installations. *Presenter: Gary Baxter, VP Sales & Marketing, Magnum Energy, Inc.*

**Products Covered:** MS and MS-AE Series, Magnum Panels, troubleshooting inverters

**Applications:** Battery-Based & Off-Grid

### MORNINGSTAR CHARGE CONTROLLER APPLICATION, CONFIGURATION AND DATA MONITORING IN THE OFF-GRID MARKET

**Thursday from 10:30 AM - 12:30 PM**

This course will cover the Morningstar product family, product applications, upcoming new product releases, in-depth setup and configuration of a TriStar controller network. *Presenter: Brad Berwald, Sr. Sales Engineer, Morningstar*

**Products Covered:** TriStar and TriStar MPPT Networking, Morningstar Controller Family

**Applications:** Battery-Based & Off-Grid

### XANTREX OFF-GRID PRODUCT FOR RESIDENTIAL, SMALL COMMERCIAL & THREE PHASE APPLICATIONS

**Thursday from 1:30 PM - 6:00 PM**

Designed for easy installation, long-term performance and reliability, the Xantrex Off-Grid products are an efficient, cost effective choice of power inverter for homes and buildings – off-grid and remote applications. Learn and understand the XW System from the features and benefits to the technical hands-on of how to install, configure the system, and trouble shoot. (NABCEP) *Presenter: Jarmo Venalainen, Technical Training Engineer, Xantrex Technology Inc.*

**Products Covered:** XW System

**Applications:** Residential, Commercial, Battery-Based & Off-Grid