North American Board of Certified Energy Practitioners

NABCEP

An overview of North America's Leading Renewable Energy Practitioner Certification Program

Presented July 2, 2009 Phoenix, Arizona



Introduction

I am Ezra Auerbach the Executive Director of NABCEP.



- Part of my passion for this job and mission comes from living off grid for 40 years.
- 23 years ago I entered the RE industry and installed wind, solar electricity and solar hot water on my home, shop and office and I was hooked for life.



NABCEP Overview

This presentation will provide an overview of the key elements of the NABCEP and its' PV Installer Certification

It will also cover the benefits that NABCEP offers to consumers, governments and installers.



It starts with a reason...

Mission Statement The mission is to support, and work with, renewable energy and energy efficiency stakeholders to develop and implement quality credentialing and certification programs for practitioners.



...a desire to distinguish...

NABCEP Certification is designed to serve professionals who choose to demonstrate their competence in specialized fields such as solar PV, solar thermal and small-scale wind by successfully passing the NABCEP exams.





...and a goal.

NABCEP's goal is to develop voluntary national certification programs that will:

- promote renewable energy
- provide value to practitioners
- promote worker safety and skill
- promote consumer confidence.





Definitions

Certification – Awarded to people, products, and processes by employees, independent agencies, and vendors.

Voluntary



Definitions

Accreditation –

Awarded to learning programs and testing laboratories by nongovernment agencies.

Voluntary, sometimes mandatory



Definitions

License – Awarded to people by government agencies.

Mandatory



Certification vs. Certificate

Nationally recognized voluntary <u>Certification</u> for professional PV and Solar Thermal Installers

- For experienced installers that have training and experience
- NABCEP Certification programs help consumers and incentive programs identify qualified installers.



The Solar PV Entry Level <u>Certificate</u> of Knowledge



- For new entrants in the industry
- The certificate demonstrates basic knowledge, comprehension and application of key terms and concepts of photovoltaic system design and installation



Task Analysis

The central core of our Certifications is the Task Analysis.

This is developed by leading subject matter experts in the field to identify what needs to be

- PV Task Analysis Main Tasks
- Working safely with photovoltaic systems
- Conducting the site assessment
- Selecting a system design
- Adapting the mechanical design
- \checkmark Adapting the electrical design
- \checkmark Installing subsystems and components at the site

Performing a system checkout and inspection

Maintaining and troubleshooting a system

taught and tested in a Certification Program.



No NABCEP Training?

NABCEP does not offer training
 It would be a conflict of interest to train and test the same individual.
 Training to the NABCEP Task Analysis is available at a wide variety of places.

Everyone from the IBEW to oldstyle solar schools covers the TA in their programs - so does our exam





- All NABCEP Certifications and Certificates of Knowledge are market driven.
 - We develop programs to meet market and industry demand.
- Our Installer Certifications (PV and ST) require a combination of training AND installation experience before a candidate can qualify to sit for the Exam.



Photo Credit: MREA Website





- The Entry Level Certificate of Knowledge is aimed at those who want to enter the industry.
- The Certificate is offered by over 100 Educational Providers to students who an entry level training program.



Certified PV Installer Over 700 individuals have earned this Certification since 2004. It is a ANSI recognized Certification. Certified Solar Thermal Installer Same rigorous standards as the **PV** Installer.





We are working on launching a Small Wind Installer Certification. The task analysis is complete as are the eligibility requirements Technical Committee members are being recruited to sit on the Exam and Study Guide committees.



Photo Credit: Bergey Wind power website



Other programs in development are: Solar Thermal Certificate of Knowledge This program will be geared to those who seek to enter the solar thermal industry. A Technical Sales Certification This will be a full Certification program that is oriented towards RE professionals who do non-installation jobs.



NABCEP Benefits

 Installers distinguish themselves by becoming Certified
 The exams are difficult and Certificants are rightfully proud of their accomplishment
 The Certification identifies them as a "best choice" for consumers





NABCEP Benefits

- Consumers can quickly and easily identify qualified PV and ST installers by looking for a NABCEP Certified Installer.
- A report presented last year sums up the benefits nicely:
- "Systems installed by NABCEP certified installers have fewer problems at the time of inspection than those installed by non-certified installers."
 PV Workforce Development and the Market for Customer-Sited PV. McRae et al. ASES 2008



NABCEP Benefits

 Governments and Utilities Benefit too.

Our Certifications eliminate



- the need for state by credentialing programs and help assure portability of credentials.
- Offer a standard to which installers getting public funds can be qualified to.
- Many incentive programs encourage NABCEP Certification of installers.



Becoming Certified

The NABCEP Candidates Handbook is the ultimate source of information about how to become a Certified Installer.

In brief, you'll need to apply and document your experience and training to qualify to sit for the exam.



North American Board of NABCEP Certified Energy Practitioners

Staying Certified

- NABCEP requires re-certification every three years.
 - All that is required, beyond the application and fee is documentation of continuing education (CE).
- We require 18 hours of CE.
 8 hours will need to be on the NEC
 The other 12 can be any variety of manufacturers trainings and other business improvement courses.



Certificate of Knowledge

- This Certificate may be earned by completing a course and then passing an examination.
- It is an entry level Certificate aimed at those looking to enter the industry at the bottom rung of the ladder.
- This is NOT an installer certification and does not guarantee employ





Contact NABCEP

Want to learn more? Subscribe to our Newsletter by sending an email with "Newsletter request" in the subjecty line to: info@nabcep.org.

 Visit our website for full details on all of our programs:





Friday, October 2, 2008 Volume #2, Issue #5 Editor: <u>Jane Pulaski</u>

The NABCEP Newsletter highlights activities about its certificants and other stakeholders. There is no fee for this newsletter which is distributed six times/year and published on <u>NABCEP's website</u>.

If you have comments about this newsletter, email Jane Pulaski at janep@irecusa.org.

As always, thanks for your interest in and support of NABCEP.

Jane Pulaski Editor

In this issue...

From the Chair Installer's Corner Special NABCEP Administration Update Featured Board/Technical Committee Member Entry Level Certificate Program Update Continuing Education/Recertification Update Other News About this Newsletter/How to Subscribe

From the Chair, by Ezra Auerbach: Certification, Recertification and the Value of NABCEP



In this issue, I want to use my column to ask questions rather than to provide news.

In previous issues, I've written about the growth of NABCEP and some of the strategic planning challenges facing us. NABCEP is doing well, our new management team, spearheaded by Executive Director Rebecca Eaton, hit the ground running and have brought a host of new resources to





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