



# Certification

Why it matters for the solar industry.

Jeff Spies  
NABCEP Secretary



SolarSpies  
Training & Consulting  
[www.solarspies.net](http://www.solarspies.net)

**SOLARSPIES**



# Jeff Spies Biography

- NABCEP Secretary - North American Board of Certified Energy Practitioners
  - NABCEP is the Solar Industry Certification Agency
- AEE Solar Director of Training 2007-2010
  - Organized the 1<sup>st</sup>, 2<sup>nd</sup>, & 3<sup>rd</sup> annual AEE Solar Dealer Conferences
    - The largest supplier based solar training events in North America.
  - The AEE Solar training webpage #1 search result on Google for “Solar Training” from 2007 to 2010
  - Featured speaker at major industry tradeshow and conferences
    - SPI, ASES, Intersolar, IREC, Northwest Solar Expo, NECA, MREF.
- Pre-Solar Experience
  - Degree in Mechanical Engineering from Michigan State University.
  - 20 years experience working in sales & marketing of electrical and mechanical motion control systems for industrial automation applications.
  - Extensive technical product training experience throughout North America and overseas.



## Certification - what is at stake?

- The health of the solar industry
  - Unregulated industries have negative consequences.
  - Solar black eye from the 1980's depressed growth in the US Solar industry.
- The confidence of the markets
  - Poor quality products/practitioners adversely impact quality industry players.
  - Rapid industry growth draws in opportunistic bottom feeders.
- Safety for workers and system owners
  - Improperly designed/installed PV systems are hazard to installers and system owners
- System performance
  - NABCEP certified PV installers install systems that are safer, produce more power, last longer, and provide a better return on investment.



# Certification - What is it?

## ■ Certification

- A process based on standards by which a nongovernmental agency validates an individual's knowledge related to a specific area of practice.
- Demonstrates to your customers, competitors, suppliers, staff and investors that you use industry-respected best practices.
- Applies to an individual installer, not to an entire company

## ■ NABCEP PV certification



- Tests whether a candidate understands the necessary elements of solar design and installation and can competently complete the task of installing a properly designed solar system.



## Certification - What it isn't

- *Certification* does not refer to the state of legally being able to practice or work in a profession. That is *licensure*.
  - Licensure is administered by states and/or local governments for public protection purposes.
  - Licensing requirements vary widely and do not necessarily guarantee quality work.
- Certification is not a guarantee of quality work, but it does reduce the potential for poor quality work.
- Certification is not a guarantee that all employees of a company are competent
  - NABCEP certification applies to the individual, not the company.
  - Insist that the lead installer is NABCEP certified.



## Certifications Vary

- Certification is **NOT** merely a certificate of attendance
  - **True certification** requires testing or validation of skills
- Some certifications have little/no value
  - Certifications without independent testing
  - Certifications without industry acceptance/recognition
  - Certifications issued by training organizations
  - Certifications issued by product manufacturers
    - Often marketing tools rather than true validation of competency
- NABCEP PV Certification is the gold standard due to:
  - ANSI accredited
  - Broad acceptance from customers, industry, and governments
  - Validation of certificants skills by industry respected testing process
  - NABCEP board and committees staffed by industry recognized subject matter experts
  - Widespread stakeholder participation



# Solar Certification from NABCEP

## ■ NABCEP administers **2 different tests**

### ■ NABCEP **Entry Level Test of Knowledge**

- **Passing this test provides no certification**, but does allow solar job seekers to demonstrate entry level knowledge to prospective employer.

### ■ NABCEP **Certified PV Installer** test

- NABCEP certified PV installers have earned a mark of distinction as the test is very challenging and passing it demonstrates strong knowledge of PV system design and installation techniques
- Applicants must complete both education and job experience prerequisites to qualify to take the NABCEP Certified PV Installer test.

**NOTE: There is NO SUCH THING as “NABCEP entry level certification” despite the training organizations claiming so.**



## End customer benefits

- Help identify qualified service providers
- High level of confidence that job will be done safely
- Quality installation will produce more power = better ROI
- Improved investor confidence
- Disciplinary process ensures complaints will be addressed





## Practitioner benefits

- Certification provides instant credibility with customers
- Certification validates personal accomplishment
  - Endorsement of skills and knowledge
- Enhances professional reputation
  - Demonstrates high level of knowledge and skill
  - Demonstrates high level of commitment to the field of practice
  - Recognition by a respected national certification organization
  - Peer recognition
- Increased career opportunity
  - Higher income potential
  - Better career advancement opportunities
  - Allows contractors to bid jobs that mandate NABCEP certified installers



## Employer benefits

- Employer has confidence that certified employees fully understand the key elements of solar design/installation
- Lower operational costs
  - Less potential for redesign due to failed inspections
- Increased safety
  - Less potential for workplace injuries
- Provides compliance with industry regulation or government requirements
- Improved customer satisfaction results from employing experienced knowledgeable professionals
- Marketing benefit - demonstrates employers commitment to competence



## Industry benefits

- Standardizes practices within the solar industry
- Advances the solar industry and increases cooperation between organizations
- Provides means to establish and enforce an ethical code
- Provides a means for an industry to self-regulate
- NABCEP Certified PV Installers lend credibility to the dizzying maze of products



## In Conclusion

- Certification is an important tool to raise the level of installer competency, system quality, and customer confidence.
- Voluntary certification helps the solar industry grow in a responsible sustainable manner.
- Not all certifications are created equal.
  - Certification without recognition or testing is of questionable value.
- Quality certification programs benefit the solar industry, employers, certified installers, and customers.
- NABCEP is the **gold standard** in Solar Installer credentialing.
  - Insist on a NABCEP certified PV installer!



Johnny Weiss insists I should use more pictures in my presentations



My pal Johnny Weiss