NABCEP
Technical PV Sales Certification

Presented by
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Jeff Spies Biography

- NABCEP Secretary - NABCEP is the Solar Industry Certification Agency
- SolarSpies training for Solar Energy International and groSolar
- AEE Solar Director of Training 2007-2010
  - Organized the 1st, 2nd, & 3rd annual AEE Solar Dealer Conferences
    - Largest supplier based solar training events in North America.
  - AEE Solar training webpage #1 Google result for “Solar Training” from 2007 through 2009
  - Featured speaker at major industry tradeshows and conferences
- 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 North America and overseas
What is at Stake

Certification
  - What is it?
  - What it isn’t

Certifications vary

Certification benefits
  - Customers
  - Practitioner
  - Employers
  - Industry

Technical PV Sales JTA
  - Qualifying
  - Site Analysis
  - Conceptual Design
  - Financial Analysis
  - Financing
  - Non-financial Benefits
  - Performance Analysis
  - Prepare Proposals
  - Present Proposal

Required Tools, Knowledge, and Skills

Qualifying and preparing for test
What is at stake?

- The health of the solar industry
- The confidence of stakeholders
- Safety for workers and system owners
- System performance

My solar installer was fantastic!
A process based on standards by which a nongovernmental agency validates an individual’s knowledge related to a specific area of practice.

Helps demonstrate to customers, competitors, suppliers, staff and investors that you use industry-respected best practices.

NABCEP Tech PV sales certification tests whether a candidate understands:

Certification - What it isn’t

- Certification does not allow you to legally practice or work in a profession. That is licensure.
  - Licensure typically administered by state or local govt
  - Licensing requirements vary widely and do not guarantee quality
- Certification is not a guarantee of quality work
- Certification is not a guarantee that all employees of a company are competent
Certifications Vary

- Certification is **NOT** merely a certificate of attendance
  - **True certification** requires testing or validation of skills
- Some certifications have little/no value
- NABCEP PV Certification is the gold standard
End customer benefits

- Helps identify qualified solar sales professionals
- Higher level of confidence that financial projections and site assessment will be accurate and ethical
- Quality site survey, conceptual design, and financial analysis results in better quality installations and improved solar industry image
- Improved investor confidence
- Disciplinary process ensures complaints will be addressed
Practitioner benefits

- Certification provides instant credibility with customers
- Certification validates personal accomplishment
- Enhances professional reputation
- Increased career opportunity
- Higher income potential
Employer benefits

- Employer has confidence that certified employees fully understand key elements of site evaluation, financial assessment, and proposal generation
- Lower sales costs
- Improved customer satisfaction results from employing experienced knowledgeable professionals
- Marketing benefit - demonstrates employers commitment to quality and competency
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
The NABCEP Technical PV Sales Certification tests candidates on the following elements of the JTA:

- Qualifying the Customer
- Site Analysis
- Conceptual Design
- Financial Costs, Incentives, and Savings
- Financial Benefit Analysis and Financing
- Non-financial Benefit Analysis
- Performance Analysis
- Prepare Proposals
- Present Proposal
Required Tools

- Checklist
- Digital camera
- Computer with internet access
- Appropriate clothing
- Roof friendly footwear
- Gloves
- Safety glasses
- First aid kit, emergency numbers, hospital location
- Ladder(s)
- Fall protection - where appropriate
- Shade assessment tool
- Tape measure
- Inclinometer
- Laser level
- Multi-meter
- Flashlight
Required Knowledge

Solar selling requires knowledge of:

- Utility interconnection
- Net metering
- Bill interpretation
- Types of utilities (public/private/co-op)
- Electrical PV concepts, safety, best practices
- Basic construction concepts, terminology, methodology, safety, & best practices
- Structural and Electrical Code (IBC, NEC, state, local, etc...)
Required Skills

- Listening
- Verbal/written communication
- Reading comprehension
- Basic math and trigonometry
- Computer skills
- Read & interpret drawings
- Map interpretation
- Use of solar site assessment & measurement tools
- Power production estimating
  - Manual and computer
7 paths to qualify for the Technical PV Sales Certification Test utilizing the following elements:

- Verifiable PV sales experience
- Training/Education
- NABCEP Entry Level Exam
- Current NABCEP Certified PV Installer
- Licensed Electrician
- OSHA 10 hour training card required for all
Preparing for the test

- Meeting the minimum requirements to take the test does not necessarily mean you will pass the test
  - Download the Tech PV Sales resource guide to help prep
In Conclusion

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