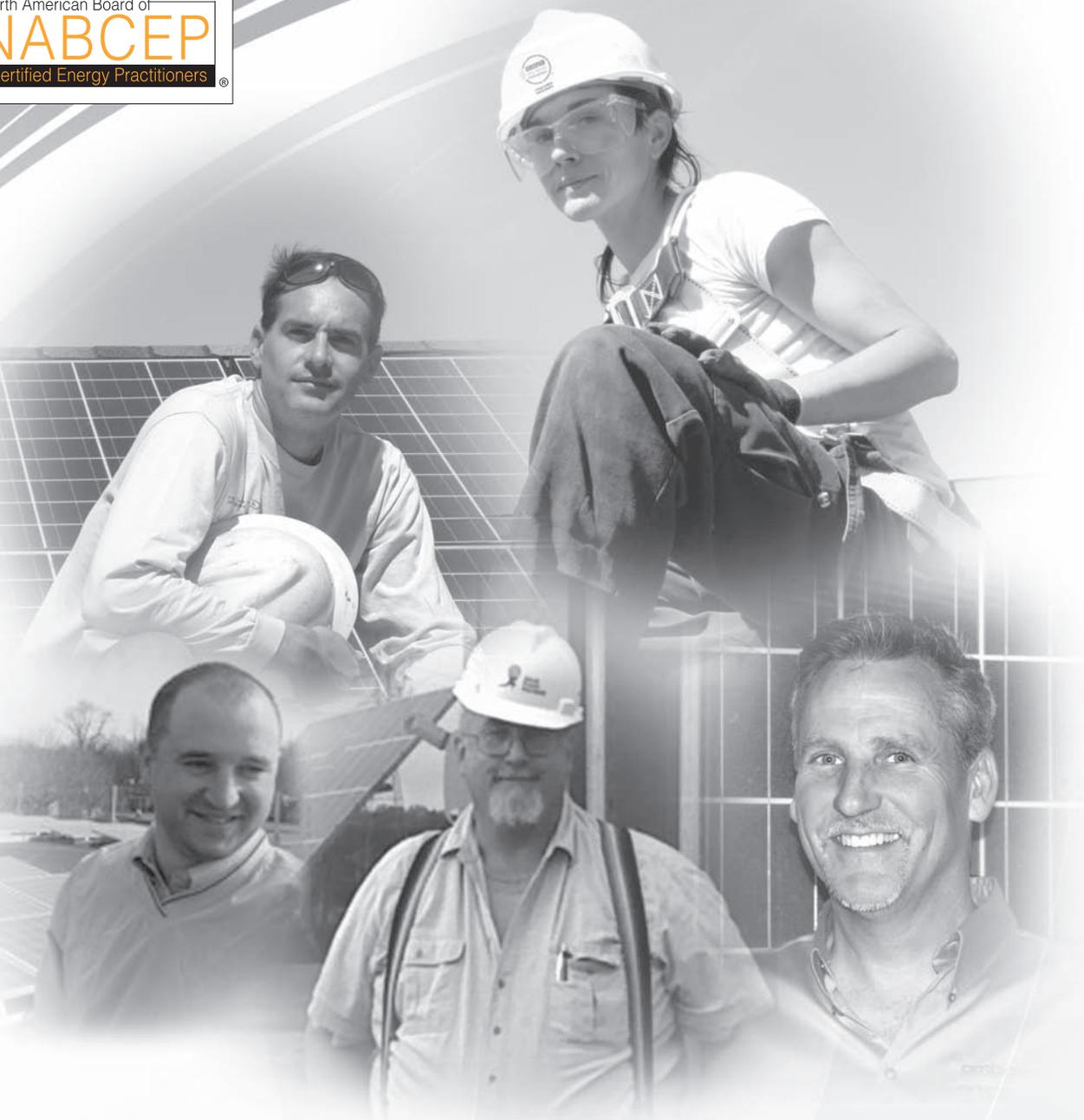


North American Board of
NABCEP
Certified Energy Practitioners®



Faces of
NABCEP



Dear Reader,

The following profiles of NABCEP certificants is intended to introduce the reader to the diverse range of jobs and responsibilities NABCEP certificants hold within their professional fields. It is clear from the profiles that the common elements they share are commitment and passion for high quality renewable energy installations. These profiles are part of an on-going series and more will be added on a regular basis. Visit the NABCEP website to read more profiles as they are added.

We at NABCEP hope that reading these profiles will help the reader understand the value of the certifications that these individuals and hundreds like them have earned through their combination of work experience, training and rigorous testing. They truly do represent some of the industry's best practitioners.

If you are a consumer or employer, be sure to look for NABCEP credentials when hiring renewable energy practitioners. If you are a practitioner we encourage you to join the ranks of those who have distinguished themselves by achieving NABCEP certification.

Sincerely,



Ezra Auerbach
Executive Director

NABCEP CERTIFICANT PROFILE

Steve Fulgham



Steve Fulgham is the Chief Executive Officer of Ambassador Energy located in Murrieta, California. Ambassador Energy is a solar training, support and distribution company, serving its family of Agencies through their Business-in-a-Box business model. Some of their services include: solar design and installation; business assistance; marketing support and brand-agnostic equipment distribution.

Steve started his work life in the computer industry, and when the commute became too harsh, he became a General Contractor in his hometown. When tax credits and incentives made renewable energy a viable option for residential building, he began putting solar systems on his building projects. "I started putting solar systems on houses and noticed that they all sold, even in a development where non-solar homes didn't."

"I became exposed to the importance of NABCEP when I was bidding on a large project in Texas. The Request For Proposal [RFP] required that either a NABCEP certificant or Master Texas Electrician be on the job site. To get this job, I would have to get NABCEP certified or I was out of the running. Since then, more and more states are requiring NABCEP certification in order to get full incentive credits," Steve explained. "I have found that, in regard to solar knowledge, a NABCEP certification carries the most weight of all licenses and certifications around the country. I liken the difference to earning a four-year degree vs. becoming a doctor."

Steve spent 80–100 hours on extra book studying in order to qualify for the exam. He passed on the first try. "This test is so good because it crosses so many boundaries. You need to know the National Electric Code, OSHA regulations, electrical circuitry and solar design."

"A NABCEP certification brings credibility to me, Ambassador Energy and our family of Authorized Agencies around the country. It's an elite group. In fact, there are fewer NABCEP certificants in this country than there are professional football players."

"We are seeing more and more that jobs are requiring NABCEP certification in order to win them and/or qualify for the maximum rebates. We are actively planning to have all of our field management team certified so that we may lead our Agencies by example. In addition, we intend to have everyone in our office take the NABCEP Entry Level exam so that the entire company has solid solar knowledge."

"While we provide incentive bonuses to employees who pass certifications, personal competitiveness takes over and everyone wants to get a higher level certificate. Multiple levels of certifications from NABCEP would be welcomed by our work force."

"I would recertify for NABCEP every year if I could. While other certification agencies offer a standard, NABCEP is the standard for the renewable energy industry."

NABCEP CERTIFICANT PROFILE

Jessica Baldwin



Jessica Baldwin operates Solar Plumbing Design (SPD) in New York City. She is a hands-on plumber who oversees two crews installing residential, solar heating (SH) installations from New York City to Albany.

“I have had a long term interest in sustainable living which was passed on to me by my parents. At age 21, I built an off-grid cabin in the Catskills on which I installed a PV system. From there, I moved to the city and began training for a plumbing contractor’s license. When I discovered that I could use my plumbing skills to install SH systems, my two life interests came together in a meaningful way.”

“While doing research about SH, I became aware of NABCEP’s certification process and the importance of that certification for knowing how SH systems work. The extreme value of the NABCEP certification is that it sets you apart from others in the field.”

Although it took Jessica two tries to pass the certification exam, she says, “I was willing to write it twice since this is my life interest not just a hobby. This certification gives me the edge since no other certification says I have explicit

knowledge and experience with SH. This specificity sets down an immediate basis of trust with the customer. My clients save a ton of headaches because they know the job will be done correctly.”

“As well my NABCEP certification proves that I am capable of understanding solar heating design parameters and can assess the proper materials to use on the job. Since my certification, the designers I work with treat me with more respect and listen to my opinions about designs before they are put on the roof.”

“From a business perspective, I am more likely to get a job over someone without the NABCEP certification. More job requests now call for NABCEP certification up front.”

“I find there is an instant rapport and trust between certificant holders. The exam is so rigorous that I am proud when my colleagues pass.”

“The only thing I would like to add to the exam is a question or two about ethical standards. I look forward to seeing if that happens when I recertify.”

NABCEP CERTIFICANT PROFILE

Will Herndon



Will Herndon is the Executive Vice President of Construction, and co-owner at American Solar Electric, Inc located in Scottsdale, Arizona. American Solar Electric provides turnkey PV systems and roofing systems exclusively for residential customers.

“When I was in high school and college I wanted to make things better in the world and working in the renewable energy industry is one way to do that,” he said.

“My NABCEP certification provided me with knowledge I can pass on to the 15 field construction teams I am responsible for. There is nothing else out there like it. It is the clear solution to fill company field operation needs.”

“While the NABCEP application process is onerous and the exam is hard it verifies that you made the right decision in taking the exam because it solidifies what you need to know.”

“I find that any new employees, who have NABCEP certification, have the credibility of competent professionals. It separates those who are more committed to the firm. In turn, this helps me determine those who can be leaders and promoted to higher positions.”

“Within our company, field construction crews appreciate the opportunity to climb the career ladder through the

achievement of certifications. They like to see a roadmap to be successful, I like to see them develop as individuals, and that development roadmap revolves around the NABCEP certification.”

“I would like to see an expansion of the certification options offered by NABCEP. Many of our field construction professionals cannot qualify for the current PV certification because it covers way more than their job description. However, it is important to have a certification that identifies them as professionals.”

“On a personal basis, my NABCEP certification helps me to contribute to the solar industry outside of my regular job by volunteering with NABCEP committees. I am able to associate with great people on the construction end of the solar business.”

“While many customers do not understand NABCEP very well, I am hopeful that the company accreditation program will impact the marketplace by eventually replacing the local utilities company oriented certifications. If this were to happen the utilities could then make available on their websites a list of NABCEP certified companies.”

“I believe it is important to keep up my professional standards and so I will be recertifying for the NABCEP credential.”

NABCEP CERTIFICANT PROFILE

August Goers



August Goers has two NABCEP certifications — Photovoltaic Installer and Solar Heating Installer. He is Vice President of Engineering at Luminalt Solar Energy Solutions located in San Francisco, California. Luminalt is a solar design-build firm, providing solar electric and solar hot water systems for single and multi-family homes, businesses, and non-profits.

“When I was 14 years old, I picked up some ARCO solar panels from the decommissioned Carrizo Plains power installation. I loved the idea of this panel lying in the sun and producing power day after day. The technology entranced me and I knew that I wanted a career in the solar industry. In fact, I am still using those panels for an attic fan at home.”

“The San Francisco Bay Area is a very competitive marketplace. I wanted to differentiate myself from other installers so I enhanced my engineering and electrical training with the NABCEP certifications for PV and Solar Heating installers. I like to have the NABCEP logo on my business card. It tells customers that I know what I am doing.”

“Studying for these exams was an excellent way for me to fully understand all of the aspects of a properly designed and installed system. This is the best form of education in the renewable energy industry at this point in time.”

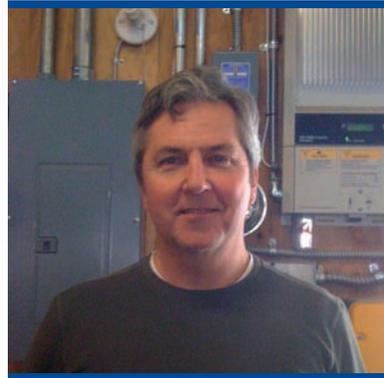
“Residential customers don’t understand NABCEP very well so, at Luminalt, we give them NABCEP informational brochures as part of educating them about the benefits of certification.”

“Commercial customers are typically more informed about NABCEP certification and they want to know if Luminalt has certificants on staff. When commercial projects are advertised, there is often a requirement for NABCEP-certified personnel and that can cause up to half of the potential bidders to drop out of the competition.”

“The value of having NABCEP certifications is so important to me that I will be recertifying for both the PV and Solar Heating certifications when it is time to do so.”

NABCEP CERTIFICANT PROFILE

Jeff Irish



Jeff Irish, a professional engineer and NABCEP Certified PV Installer, is the president of Hudson Valley Clean Energy, Inc. (HVCE) and Adirondack Solar located in New York State. The companies are full service providers specializing in the design, installation, and servicing of these renewable energy systems.

"I was living in Ontario, Canada during the oil shocks of 1974 and '79, and was so motivated by these events that I designed, with two college classmates, a zero net energy house."

After obtaining an MBA and then a long career with G.E., he began a new career. "I researched renewable energy again, at the beginning of the new millennium, and saw that photovoltaic (PV) prices were going down and oil prices up which made for a reasonable business opportunity. Our first system went up in 2002."

"From the beginning, the New York State Energy Research and Development Agency (NYSERDA) were very rigorous about demanding high quality PV installations to qualify for state incentives. They did not want a repeat of the 1980's solar thermal debacle."

As a P.E., Jeff is one of the few certificants to say he took an even tougher exam, in electrical power, but maintains that, "The NABCEP certification exam is difficult and should remain so."

"My NABCEP certification benefits my company because it helps to distinguish us from the competition. NYSERDA lists all of the qualified installation companies, in New York State, on its website and they highlight NABCEP certificants. So we get called before others. As well, all public bids now call for NABCEP certification."

"While our customers want to hire a NABCEP certificant, they are confused about difference between the level of knowledge and experience there is between an individual with Entry Level training and a full certificant."

"I am glad to see a growing number of NABCEP certificants. I'm also happy that NABCEP developed a different stamp or logo to very clearly distinguish between the Entry Level achievement and the PV Installer Certification."

"I have already recertified twice and also volunteer on a number of NABCEP committees."

NABCEP CERTIFICANT PROFILE

Ed Murray



Ed Murray is the CEO and President of Aztec Solar, Inc. located in Rancho Cordova, California. Aztec Solar is a solar energy, turn-key solution provider committed to meeting the energy needs of home and business owners by offering in-house solar water heating, solar pool heating and solar electric power.

“When I was in college I realized there was no such thing as an infinite supply of energy materials and this spurred me to find a way to make a positive difference for the planet. So, I looked for and found work in the renewable energy industry.”

“I actually fought against the concept of NABCEP certification for a long time. Then I remembered the bad history of solar thermal installations during the 1970s and 80s, and I saw that NABCEP was the key to closing an unprofessional loop for installers.”

“I was turned around when both the old and new solar guys saw NABCEP as a way to make us better professionals. People need to feel the solar industry has professional content.”

“Having written the California licensing test every five years I thought I knew everything necessary to take the NABCEP exam so I didn’t study for it at all. I was pleasantly surprised at how very comprehensive and difficult it was.”

“My NABCEP certification adds a layer of professionalism to the firm. Because solar heating (SH) is not as wide spread as PV, the NABCEP certification raises the knowledge bar for installers. You know that they know their stuff. Aztec Solar highlights my certification in its marketing materials because it puts the firm one step above others.”

“The camaraderie among of the NABCEP certificants is very rewarding. You have mutual respect for each other and are working together to improve the solar industry, even if you are competitors.”

“I feel that my NABCEP certification tells everyone that I am the best I can be.”

NABCEP CERTIFICANT PROFILE

Goldah Moore



Goldah volunteering, in Tanzania, to install PV panels on a community learning center.

Goldah Moore has a NABCEP Solar PV Installer Certification. She works for Whidbey Sun and Wind Renewable Energy Systems in Coupeville, Washington, a system integrator that provides solar electric, solar water heating, and wind power.

“I began doing electrical work eleven years ago with my father, who is a licensed electrician. Three years ago I decided to become a journeyman electrician and got my Washington State electrical license.”

“Whidbey Sun and Wind hired my father and I about that time as their residential and commercial journeymen. The work was more interesting than conventional residential wiring and in line with my thoughts about sustainable living. This opportunity also tied in with a Solar Energy International course I had taken and I was excited to be working in the solar industry.”

“After working with Whidbey Sun and Wind for three years, a number of employees went to the Solar Power International show together. After visiting the NABCEP booth, all four of us decided to take the NABCEP Certification Exam.”

“The four of us worked as a study group for three months to prepare for the NABCEP exam. One of the biggest benefits I gained from this experience was the knowledge I gained through this study group.”

“Passing the exam has solidified my professional stature and greatly increased my confidence in my abilities to do solar installations well. It is nice to say, ‘I’m NABCEP Certified.’”

“I believe that having the NABCEP certification would be an advantage to me if I was looking for a job. I know my boss feels good about having three NABCEP Certified Solar PV Installers in his company.”

“This certification is an important asset for me so I will definitely recertify.”

“Two months after I received my NABCEP certification, I went to Chole Island, Tanzania with Solar Nexus International, and helped to install three solar systems at the Chole Learning Center. It was a wonderful experience and the knowledge that I gained while studying for the NABCEP exam was invaluable on this trip.”

NABCEP CERTIFICANT PROFILE

Bruce Padgett



Bruce Padgett obtained the NABCEP Certification for Solar Heating Installer in 2008 and is the founder and president of Capitol Solar Energy LLC located in Denver, Colorado. Capitol Solar Energy designs, installs, and services solar heating systems. He earned a BA degree from the University of Colorado in 1978 in Environmental Studies and Solar Energy Physics.

“In 1982, I was broke, unemployed, and had just moved to the Denver area. I responded to a ‘help wanted’ ad for a solar heating company that was booming due to government incentives. One month later, they went broke. So I and one of my coworkers started our own solar thermal company. We survived with a commitment to installing systems that worked well and to excellence in workmanship and service.”

“I was asked by the Colorado Solar Energy Industries Association (CoSEIA) to become a NABCEP Certificant in order to sit on the CoSEIA committee to advise the Governor’s Energy Office on solar heating matters.”

“I believe that my passing of the Solar Heating Installer Certification Examination was due to the fact that it tested for the expertise that one learned through hands-on experience and knowledge gained from being in the solar industry. There were few questions about vague and obscure concepts.”

“Even though I have not advertised my NABCEP certification on my website, I have noticed that I got some telephone calls from potential customers who had seen my name on the NABCEP website.”

“I feel that the NABCEP certification has provided me with enough value that I am planning to recertify.”

“In the future, I would like to see NABCEP convince building departments that the NABCEP certification is the most relevant qualification for knowledge of solar thermal design. I wish they would use the NABCEP certification as a requirement to pull solar permits, because of its specific focus on solar technology, rather than less applicable licenses.”

NABCEP CERTIFICANT PROFILE

Blake Jones



Blake Jones of Namaste Solar shows President Barack Obama and Vice President Joe Biden the ballast trays of a T-10 flat roof mounting system on top of the Denver Museum of Nature & Science, February 2009.

Blake Jones holds the NABCEP PV Solar Installer Certification. Blake is a co-founder of employee-owned Namaste Solar located in the Boulder/Denver metropolitan area in Colorado. Namaste Solar provides residential and commercial, governmental and non-profit “turn-key” solar PV installations.

“After graduating from college I got a civil engineering job in the oil and gas industry. With help from my older brother I gradually awoke to the benefits of renewable energy and the disadvantages of our over-dependence on fossil fuels.”

“In pursuit of my newfound interest in renewable energy, I went to Nepal for three years and installed solar, micro hydro, and wind systems for a Nepali renewable energy company based in Kathmandu. When I returned to Colorado in late 2004, I co-founded Namaste Solar with two colleagues because I wanted to continue the type of work I had done in Nepal.”

“In Colorado, the solar incentives program began in 2006 so I decided to take the NABCEP exam. I was attracted to the NABCEP certification because of the skills and knowledge it represented. I also wanted to support NABCEP because I believe that its certifications are very beneficial to the solar industry.”

“At Namaste Solar there are 22 individuals who are NABCEP certified. Our company cares a lot about individual professional development and NABCEP certifications are something to shoot for since they promote individual pride and validate their skills and knowledge. As a result, we provide lots of encouragement and support for our colleagues to learn, grow, and get certified.”

“NABCEP certifications establish credibility and instill confidence with vendors, installers, and other industry partners. While the specific benefits of certification are difficult to quantify with customers, the value attached to NABCEP certifications is gaining traction.”

“When I was working on new Colorado solar legislation with the local chapters of the Colorado Solar Energy Industries Association (CoSEIA), International Brotherhood of Electrical Workers (IBEW), and Independent Electrical Contractors (IEC), one area of common ground that all of the stakeholders could agree on was to use the NABCEP certification as the skills requirement standard.”

“I have already recertified once and plan to continue recertifying because NABCEP is the type of organization that I want to support.”

NABCEP CERTIFICANT PROFILE

Brad Ritter



Brad Ritter holds the NABCEP PV Installer Certification and is the training coordinator for Solar Solutions and Distribution, LLC (SSD) located in Denver, Colorado. SSD wholesales PV components to integrators, electricians, roofers, developers, resellers, and utilities.

He provides tech support and training to other installers and in-house sales staff, and also provides design question support to customers.

"I have long been interested in renewable energy and I found good educational opportunities available in that field. Also, when I looked at the growth potential for the solar industry in 2006/2007, I saw that it was projected to increase for twenty years, so this seemed to be a reasonable industry to get into."

"NABCEP's certification had a big draw for me, because it was like being in a graduate program after completing a two year college program. With a NABCEP certification, I could pick wherever I wanted to go job wise. I see more and more opportunities for NABCEP certificants."

"I sat for the NABCEP exam within one year of completing the required two installations and the advanced study courses. It took quite a bit of preparation time to review all of the materials listed in the study guide. It was worth it though."

"This certification has opened more doors and provided a variety of job opportunities to me. It puts me at the front of the line for employment opportunities."

"The NABCEP certification tells everyone that they are talking to someone who 'knows their stuff' and this is very useful at the local level."

"I work for a wholesale only distribution company that provides training about the products it sells and I have found that it helps with the manufacturers to be NABCEP certified."

"In fact, this company is committed to having all employees more educated about solar whether they are sales representatives or counter staff."

"The NABCEP certification is known as the one that's hard to get. Don't ever change that!"

NABCEP CERTIFICANT PROFILE

Kelly Provence



Kelly Provence is one of a very small number of people who holds three NABCEP certifications: PV Installer, Solar Heating Installer, and PV Technical Sales. Kelly is the owner of Solairgen School of Solar Technology located in Dahlonaga, Georgia. Solairgen is a training company that offers a complete program for electric solar panel installers and PV technical salespeople. Kelly is also an IREC/ISPQ Certified Master Trainer and a licensed master electrician.

“I have always been an environmentalist, so in the late 1990s I felt it was time to take a serious look at my own ecological values, so I began incorporating PV installations into my electrical business.”

“In 2002, I began focusing my efforts solely on PV, installing mainly off-grid and battery back-up systems. I branched out into solar heating installations from there and sought certification in that area. Getting my NABCEP PV and Solar Heating Installer Certifications definitely opened doors for me; I received multiple job offers because of my NABCEP certifications.”

“After three years volunteering as a director with the Georgia Solar Energy Association (GSEA), lobbying state and federal politicians on environmental issues, I realized there was a need for competent installation training, and there was no training facility in Georgia.”

“It became clear that the solar installation industry needed a way to recognize experienced installers, and I shared NABCEP’s core purpose of maintaining high industry standards. I sat for my first certifica-

tion, NABCEP PV Installer Exam, and since then I have consistently advocated for NABCEP certifications to all my students.”

“In 2005 I transitioned the company to solar training exclusively, and it’s now my full time occupation. Approximately 50% of the people installing in the state have taken Solairgen training, and many of them have gone on to become NABCEP certified professionals. Today, many entities in the state, such as Georgia Electrical Membership Companies (EMCs), recommend or require installations to be performed by NABCEP certified contractors.”

“My NABCEP certifications tell customers I have achieved high-level skills, and let them know I didn’t get into this yesterday. NABCEP certification distinguishes individuals within the industry.”

“I went for the PV Technical Sales Certification because students needed to be confident I have expertise in the subject I’m teaching, and I needed to know what the test was like.”

“My customers respond positively because they understand NABCEP is the best example of self-regulation within the industry. I support it 100%. My students know what NABCEP certification means to their careers; most are on track to become NABCEP Certified Installers or PV Technical Sales representatives.”

“I will definitely be re-certifying when the time to do so comes up.”

NABCEP CERTIFICANT PROFILE

Louis Woofenden



Louis Woofenden is a certified photovoltaic and solar heating installer. He works at Net Zero Solar located in Tucson, Arizona. Net Zero Solar installs solar electric, solar thermal, wind and water pumping systems for residential and commercial properties.

“I grew up in an off-grid home and appreciate that renewable energy is a way to do something good with a fun technology. Working in the renewable energy industry seemed a natural progression for me. I can change the world around me and educate others about ways to improve their lives.”

“After a few years as an installer, it seemed to me that getting my NABCEP PV Installer Certification was a good career move. Just the decision to take the test forces you to make sure that you have the knowledge to pass the test. I spent a lot of time studying and passed the test on my first try.”

“Because I also design and install solar heating systems, I decided to take the NABCEP certification test for that.

Again, I learned a lot while preparing for the exam. I have recently completed my second recertification for my PV installer certification, and intend to keep both certifications current in the future.”

“Most customers do not understand what NABCEP is, and it does take some time to explain the concept. They do understand then that I have gone through the effort of getting extra education about solar design and installation.”

“On the other hand, I know that some customers have found me through the NABCEP website. They usually are already knowledgeable about renewable energy and are actively looking for a NABCEP Certified Installer.”

“It is hard to measure whether a NABCEP certification is a competitive advantage, however, it does shine an outside spotlight on you. With the current economy there is more competition for solar installation jobs. This is a nice way to show legitimately that you have experience and knowledge in this industry.”

NABCEP CERTIFICANT PROFILE

David Boynton



David Boynton is part of a small group who hold three NABCEP certifications: PV Installer, Solar Heating Installer and PV Technical Sales. David is director of product development and training at Southern Energy Management, Inc. (SEM), located in Morrisville, North Carolina. Southern Energy Management provides energy efficiency and solar power for homeowners, residential and commercial builders, companies, non-profits, and government clients.

“My first degree was in Physics and after a summer internship with a Nature Conservancy (The Leelanau Conservancy) I returned to university and earned an environmental engineering degree. Then, I taught high school science for nine years. However, I wanted to work in an area that was closer to my roots, so when a lead from a biodiesel listserv came up on a job opportunity with a solar startup (which was SEM), I decided to join their team.”

“I wanted to distinguish myself professionally and an electrical contractor’s license was not appropriate for me. In looking for available certifications I really appreciated that NABCEP provided a third-party certification.”

“With a NABCEP certification everyone would know this was the best standard both ethically and practically. NABCEP certificants are accountable as a group to the solar industry.”

“My three certifications enable me to grow with the company and I am prepared for future possibilities in the solar industry. These certifications show my co-workers that these are worthy goals to shoot for. As more of our company’s team members gain certifications, a culture grows within the company for everyone to absorb standards as best practice.”

“Our customers are looking for NABCEP certified installers and they do not have to ask us if we are NABCEP certified. The Installer Locator on the NABCEP website has driven clients in our direction. Also, there are eight employees at SEM and we have a combined eleven NABCEP certifications between us; this has differentiated our company from others in the state.”

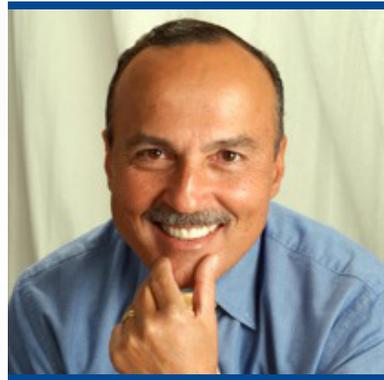
“Since my PV Tech Sales certification came through, clients specifically ask for me to go out to their homes for design and installation advice, even though I am not in the direct sales department.”

“I like the knowledge that not everyone is capable of getting the NABCEP certification—it can’t just be bought.”

“I am already working on accumulating continuing education credits for recertification.”

NABCEP CERTIFICANT PROFILE

Mike Holt



Mike Holt is the chief executive officer of Mike Holt Enterprises, which operates a publishing company to serve the needs of the electrical community exclusively. He is widely recognized as an expert on the National Electrical Code™ and, since 2010, a NABCEP Certified PV Installer.

When he explains how he came into the solar industry he says, “I was forced into it. After many years as an electrician, educator, and having written fifteen books for electricians, I thought I had done everything. Then customers began to ask me about installing solar systems. I wanted to know more about it.”

“When I attended my first manufacturer’s training class, the instructor kept advising the participants to get NABCEP certified. I found out what he was talking about and what was required to become certified. I really appreciated the fact that in order to take the exam I needed to train hard. The exam was a challenge. I have never scored so low on an exam!”

“Now, I feel like I belong to a special club. I have a greater sense of confidence about my solar skills.” Through his training activities Mike works with a lot of electricians and he feels, “Individuals without NABCEP certification are really not able to add to the growth of the solar industry because they don’t know about attaining the proper performance from a PV system.”

As a long-standing electrician, Mike knows that on most jobs there is little design work to be done. Nevertheless, he feels that the amount of system design knowledge called for in the NABCEP PV Installer Job Task Analysis is appropriate. “On the job, this design knowledge means that the NABCEP certified individual is the ‘go to’ person. They are the ones who know how the whole job goes together. They need to know everything from the initial design to the end performance of the system,” he says.

As a trainer, Holt has a clear view of the importance of learning new skills throughout an individual’s career. “In a changing job market electricians should position themselves for future success by preparing for future possibilities. More customers are asking about PV installations and electricians should be prepared to provide the answers. Individuals who think that certification is irrelevant are dinosaurs—lazy and expending zero effort to improve their skills. Certification brings safety to the table, which is very relevant on the job.”

“PV is a young industry with participants who are enthusiastic about their special skills. NABCEP is doing a great job in providing a professional, caring, and recognized certification to the solar industry.”

NABCEP CERTIFICANT PROFILE

John Donoghue



John Donoghue has passed three NABCEP certification exams: PV Solar Installer, Solar Heating Installer, and PV Technical Sales. John is the founder and president of Cape Fear Solar System, LLC (CFSS), located in Wilmington, North Carolina. CFSS specializes in the design and installation of PV, domestic hot water, and pool systems.

“After leaving college in the 1990’s, I took the opportunity to work in France. While there I learned about different types of energy generation and when I returned to North Carolina I decided to get into the solar industry.”

“Upon my arrival in Wilmington, I went for a helicopter tour to see the status of the solar industry in Southeastern North Carolina. Given the many sunny days that area has, surprisingly, there were only a small number of solar heating systems and no PV at all. It struck me as odd and my decision to establish a solar installation company was made.”

“When I entered the solar industry I quickly came to understand that finding qualified personnel would be the biggest challenge. So I began my training and sought other like-minded professionals that would be willing to do the same, all under the wing of CFSS. After attending training courses in alternative energy at North Carolina Solar Center and Appalachian State University I realized that a NABCEP installer certification would be my goal as it is the gold standard in the solar industry.”

“The installation of PV or solar heating systems requires much more than electricians or plumbers are typically trained to do. It is important that these systems are installed properly to provide estimated production and

longevity. Trades such as plumbing and electricity should be encouraging individual training in the solar field with the aim of providing reliable solar systems to consumers.”

“The NABCEP certification is greater than the scope of the day-to-day tasks on the roof.”

“With the achieved triple NABCEP certification, I have a better understanding of the overall industry and I can do a better job of communicating the essential information to clients, especially at the beginning of the installation process, which can sometimes be overwhelming for them. People are put at ease knowing that I am licensed, insured, and certified. Satisfied customers are the best referrals.”

“The achieved NABCEP certifications do help me distinguish my work from others. NABCEP certification says that I have the background and experience to perform at a higher standard. I am able to package myself as a product with NABCEP in the forefront.”

“The fact that NABCEP is a third-party independent credentialing organization adds a lot of credibility to these certifications and will be increasingly important in the future.”

“Given that there are currently only four solar professionals in the United States with three NABCEP certifications, this provides CFSS with an unbeatable competitive advantage.”

“I strongly believe in and promote the NABCEP organization and believe that certification should be the goal for every serious professional in the solar industry.”



The North American Board of Certified Energy Practitioners (NABCEP) is the most respected, well- established, and widely recognized national certification organization for professionals in the field of renewable energy. NABCEP is a volunteer board of representatives who are chosen based on their experience and involvement in the solar energy industry. NABCEP’s mission is to develop and implement quality credentialing and certification programs for practitioners by supporting and working closely with professionals and stakeholders in the renewable energy and energy efficiency industries.

These profiles are produced through the volunteer efforts of Melinda Auerbach as interviewer and editor. NABCEP thanks Melinda for her ongoing commitment to this publication.