3.NABCEP Board Eligible PV Installation Professional® (PVIP) Certification Pathway Requirements

The NABCEP PV Installation Professional Certification is a voluntary board certification that provides a set of international standards by which PV Installation Professionals with skills and experience can distinguish themselves from their competition. Board Certification provides a measure of protection to the public by giving them criteria for judging the competency of practitioners. It is not intended to prevent qualified individuals from selling, servicing, or installing PV systems or to replace state license requirements.

This pathway allows for those who have completed their advanced training and OSHA requirements to sit for the exam closer to completing their training. Once an applicant has passed the exam, they are considered Board Eligible until they have completed their experience requirement. These installations must have been completed within the **two (2) calendar** years prior to the application submission date or **three (3) calendar** years after taking and passing the exam. If the experience requirement is not completed after three (3) calendar years of taking and passing the exam the applicant will be required to reapply and retake the exam. Until an applicant has completed all required steps, applicants do not receive a certification number and are **not** considered to be fully NABCEP Certified.

3.1 Eligibility Requirements

To become Board Certified and maintain certification, the Applicant must:

- Be at least 18 years of age
- Meet prerequisites of related experience and education as outlined below
- Complete an application form documenting all requirements
- Sign and agree to uphold the NABCEP Code of Ethics
- Pay Application and Examination Fees to NABCEP
- Pass a written examination
- Once Board Certified, complete continuing education and experience requirements, submit a recertification application, and pay a recertification fee, within the three (3) year recertification timeframe.

3.2 Experience Requirements

All systems submitted with the application must meet the following minimum criteria:

- The Applicant shall have performed in a decision-making role (DMR), which had a material impact on the quality and serviceability of the PV installation. This may include individuals employed as Lead Installers, System Designers, Project Managers, Site Managers, Foreman, Electricians, System Engineers, and Quality Assurance/Commissioning agents. Due to the variety of decision-making roles that may be involved with any particular system installation, more than one person may qualify for each system; however, each Applicant must document their specific role and level of responsibility for each installation.
- Installations must have been completed within the **two (2) calendar** years prior to the application submission date or **three (3) calendar years** after taking and passing the exam.
- All installations must be complete and have a permit and a final approved inspection.

• All systems must have a minimum rating of 1 kW DC (STC).

3.3 Qualifying for the Examination

NABCEP recognizes that professionals in the field of renewable energy and energy-efficient technologies receive their training and work experiences in a variety of ways. NABCEP Staff will review each application to determine compliance with eligibility criteria.

To qualify to sit for the NABCEP PV Installation Professional (PVIP) Certification Examination, every Applicant, regardless of background, education, experience, or geographical location, will need to document:

- Completion of a minimum of 10 hours of OSHA Outreach Training Program for the Construction Industry training (or government equivalent); **AND**
- Completion of at least 58 hours of advanced training as defined in Section 3.5.2 below (**Note:** These hours of training do not need to be in addition to apprenticeship or degree coursework if the requirements of Section 3.5.2 were met within the curriculum and timeframe); **AND**
- Completion of installations equaling at least 6 Project Credits

Projects Credits are as follows:

System size of 1 - 999kW = 2 Project Credits System size of 1MW and up = 3 Project Credits

3.4 Documenting Experience

For each completed PV system, an Applicant is required to submit documentation that summarizes system information, document approval by a governing body, and verifies their decision-making role. NABCEP reserves the right to contact system owners/operators, permitting authorities, employers, and sub-contractors to verify the Applicant's work experience and decision-making authority.

3.4.1 System Summary

To document experience as a PV Installation Professional, Applicants are asked to provide a concise description of the system and the work performed, including:

- System location
- Date system completed
- System info (PV array size, number of inverters and total cumulative inverter capacity)
- Name and phone number of installation contractor
- Name and phone number of contractor listed on the permit or inspection
- Name and phone number of Applicant's supervisor
- Description of work performed by the Applicant

3.4.2 Documenting System Installation

To document the system completion date and that the system was installed according to applicable codes, an Applicant is required to submit a copy of Electrical and/or Building Permit(s) and Final Inspection Report(s) issued by the local Authority Having Jurisdiction (AHJ) for each system submitted*. **In jurisdictions where permits and inspection reports are not issued,** the Applicant is required to submit an inspection report written by an independent qualified electrician recognized by the AHJ, an independent certified electrical inspector or a

NABCEP Board Certified PV System Inspector (PVSI)**. **Inspections may not be completed by the Applicant, Installation Contractor or customer.**

*Note: NABCEP cannot accept site plans, drawings and/or permit applications in lieu of the actual approved permits and/or final approved inspections.

**A NABCEP Board Certified PV System Inspector may be found on the <u>Board Certified</u> Directory on our website.

3.4.3 Documenting Decision-Making Role

If the Applicant was named on the permit/inspection document(s), no additional documentation is needed to verify they held a decision-making role that had material impact on the installation. If the Applicant was not named on the permit/inspection document(s) but held a decision-making role that had a material impact on the installation during the design, project management, installation, and/or commissioning/quality assurance process, the Applicant is required to submit one of the following:

- A physically signed letter on company letterhead from the person, or a member of senior management from the company, who is named on the permit/inspection document(s). The letter must include the addresses of the installations listed in the Applicant's application and clearly explain the role(s) and decision-making authority the Applicant held for the system design, project management, installation, and/or commissioning/ quality assurance process for the system installation; **OR**
- Design plans and/or line drawings identifying the Applicant as being responsible for the drawing or review of the design; **OR**
- A commissioning or quality assurance report which identifies the Applicant as being responsible for the system commissioning or quality assurance process.

3.4.4 Additional Information and Documentation

NABCEP reserves the right to contact system owners/operators, permitting authorities, and responsible contractors to verify information listed in the application. The NABCEP Application Review Committee decides Applicant eligibility based on application information and documentation submitted in support of the application.

3.5 Training Requirements

A list of NABCEP registered courses may be found on the <u>NABCEP Course Catalog</u> on our website.

3.5.1 OSHA 10 for Construction Industry Training

All Applicants are required to show proof of completion of a minimum of 10 hours of the Occupational Safety and Health Administration (OSHA) Outreach Training Program for the **Construction Industry**, or government equivalent. To find an OSHA class, Visit: https://www.osha.gov/training/outreach

3.5.2 PV Installation Training

PV Installation training must meet the following criteria to be accepted in an application:

• All training must have been completed within the five (5) calendar years prior to the submission

- of the application.
- All training must have a formal training format, with a teacher-learner structure. This implies a
 connection between a learner and a learning source. Acceptable training can include online webbased training in which the student is separated from faculty and other students, but where the
 learner receives feedback and the student's progress is monitored. All hour requirements are
 based on "contact hours" between the teacher and the learner.
- A minimum of fifty-eight (58) prescribed hours of advanced training is required for each candidate.
 - Forty (40) hours must have been taken with an accredited institution and cover "advanced" PV installation and practices as outlined in the NABCEP PV Installation Professional Job Task Analysis (PVIP JTA). "Advanced" is defined as a course which provides instruction beyond the "basic," "fundamental," or "introductory" PV Installation principles and practices. Courses should be designed for the Professional who is prepared to maintain a decision-making role in the design, project management, installation, and/or commissioning & maintenance of a system. Advanced PV training must be offered by one of the following accredited education providers:
- Institutions accredited by an agency recognized by the federal Department of Education, or government equivalent (Accredited Universities, Colleges, Community Colleges, etc.) (http://ope.ed.gov/accreditation/search.aspx)
- U.S. Department of Labor Registered Apprenticeship Training Programs (www. doleta.gov/oa/)
- U.S. Department of Veteran Affairs approved WEAMS Institute (http://inquiry.vba.va.gov/weamspub/buildSearchInstitutionCriteria.do)
- Interstate Renewable Energy Council (IREC) Accredited Training Providers for the NABCEP PV Installation Professional Job Task Analysis (http://www.irecusa.org/credentialing/credential-holders/)
- American National Standards Institute (ANSI)/IREC 14732 Accredited Certificate Programs
 (https://www.ansica.org/wwwversion2/outside/ANRECdirectory.as-p?menuID=229) or
 ANSI/ASTM 2659 Accredited Certificate Programs
 (https://www.ansica.org/wwwversion2/outside/CAPdirectory.asp?menuID=212) that are based
 on the NABCEP PV Installation Professional Job Task Analysis
- Training institutions approved by State Contractor Licensing Boards or government equivalents
- State or Provincial Department of Education or government equivalent licensed Vocational / Technical training programs
 - **Note:** Courses offered by private training organizations or businesses that are not accredited or otherwise recognized by a third party as described above, **will not** be accepted for the minimum of 40 hours of advanced accredited PV installation and design training.

Eighteen (18) hours may be obtained from non-accredited, non-certified sources such as:

- Courses covering electrical, fire or building codes relevant to the installation of PV systems
- Having an active NABCEP PV Associate (PVA) credential
- Associate Level coursework through a NABCEP Associate Registered Training Provider AND a
 passing score on the NABCEP PV Associate (PVA) Exam (Associate Education Pathway only).

Note: Introductory/Fundamental/Entry Level courses leading to the NABCEP Associate Exam do not qualify for the minimum 40 hours of advanced PV installation and design.

- Additional OSHA or equivalent workplace safety courses above and beyond the required OSHA 10-hour course
- Training programs and courses registered with NABCEP for Continuing Education Credits for the PVIP recertification
- Any other coursework that addresses topics included in the PVIP JTA, such as courses taught by a non-accredited training organization

3.6 Documenting Training

To document training, the Applicant is required to submit a **certificate of completion** or a **transcript** for each completed advanced training program or course used to meet the minimum training requirements. All certificates of completion and transcripts must clearly state that the course covered subject matter directly relates to advanced PV installation or the National Electric Code (NEC). If NABCEP has questions regarding the subject matter and/or content of the course, then the Applicant will be required to provide a course outline or syllabus and a signed letter on letterhead from the training provider or instructor detailing how many hours were spent passing the exam the applicant will be required to reapply and retake the exam. Until an applicant has completed all required steps, they do not receive a certification number

ntil an applicant has completed all required steps, they do not receive a certification number and are **not** considered to be full NABCEP Certified.

- OSHA 10 for Construction Industry Training
- 58 hours of advanced PV related training: Forty (40) hours must have been taken with an accredited institution and cover "advanced" PV installation and practices as outlined in the NABCEP PV Installation Professional Job Task Analysis (PVIP JTA). Eighteen (18) hours may be obtained from non-accredited, non-certified sources
- Installations must have been completed within the **two (2) calendar** years prior to the application submission date or **three (3) calendar** years after taking and passing the exam.