

PROPOSED INTRODUCTION, JOB DESCRIPTION, AND SCOPE STATEMENT FOR THE NABCEP CERTIFIED PV INSTALLATION PROFESSIONAL JOB TASK ANALYSIS

NABCEP is proposing revisions to its flagship Solar PV Installer Certification. The revisions will rename the certification and broaden the scope of who is eligible to attain the certification. The following pages contain a draft of proposed changes to the Introduction, Job Description and Scope Statement of the Job Task Analysis. They represent the text that will appear in the open pages of the NABCEP Certified PV Installation Professional Job Task Analysis when the proposed changes are finalized.

Introduction

This document presents a comprehensive Job Task Analysis (JTA) for individuals who perform responsible decision making roles with respect to the design, installation and commissioning of Photovoltaic (PV) systems. It is important to note that the tasks outlined in this JTA are applicable to a range of installation personnel including but not limited to: installers; project managers; installation foreman/ supervisor, and designers. The common thread between these individuals is that they will need to be fully conversant with and able to apply the knowledge areas contained in this document.

This JTA introduces a broadening of the scope and definition of the previously used term “PV Installer” and is reflective of the evolution of job roles and responsibilities in the Photovoltaic Installation industry. The industry has grown and matured over the past decade and this document reflects these changes in job roles. It is important to note that while the range of personnel that hold responsible roles in the PV installation industry has evolved the basic knowledge areas contained in the JTA remain fairly constant.

This task list assumes the NABCEP Certified PV Installation Professional starts with a system design package, complete with major components, manufacturer installation manuals, system schematics, and assembly and troubleshooting instructions. Even if the NABCEP Certified PV Installation Professional was responsible for the design of the system this JTA begins with the step of verifying the accuracy of the design. Likewise if the personnel did not design the system he or she must be fully knowledgeable about systems design, as he or she may be required to adapt the design to fit a particular application or customer need.

While these tasks described in this JTA have been developed based on conventional designs, equipment, and practice used in the industry today, they do not seek to limit or restrict innovative equipment, designs, or installation practice in any manner. As with any developing technology, it is fully expected that the skills required of the practitioner will develop and change over time as new materials, techniques, codes, and standards evolve.

Job Description

Given a potential site for a solar photovoltaic system installation and given basic instructions, major components, schematics, and drawings, the NABCEP Certified PV Installation Professional will: specify, adapt, implement, configure, install, inspect, and maintain any type of photovoltaic system, including grid-connected and stand-alone systems with or without battery storage, that meet the performance and reliability needs of customers in the United States and Canada, by ensuring quality craftsmanship and compliance with all applicable codes, standards, and safety requirements.

Scope of Job Task Analysis

NABCEP Certified PV Installation Professionals work in a variety of responsible roles on PV installation jobs. He or she fulfills a decision-making role that helps ensure the quality and serviceability of the PV installation. The scope of the JTA is such that Certified PV Installation professionals fill a wide range of job positions within the industry, taking responsibility for installations of varying size and complexity. As such, the scope of their duties may vary considerably. Due to the range of responsibilities and skills that may fall within the scope of a NABCEP Certified PV Installation Professional's job duties, this Job Task Analysis is very broad in scope: not all certificants will perform all the tasks described herein.

It is expected that all individuals who achieve NABCEP PV Installation Professional Certification will be familiar with and capable of executing all the tasks described as "critical" and that these tasks will be common to most if not all PV installations. It is further expected that all individuals who achieve NABCEP PV Installation Professional Certification will be familiar with all the tasks described as "important." These tasks may not be performed on all installations but are an important part of the certified installer's body of knowledge. Those tasks that are described as "useful" are performed more infrequently by the certified installer and are listed in the Job Task Analysis primarily for the benefit of those wishing to ensure they have the broadest possible knowledge of the tasks associated with PV Installations.

Candidates preparing for examination and educators developing curriculum should be aware that those questions regarding tasks described as "critical" are most likely to be included in examinations; tasks described as "important" may be on the examination; and those described as "useful" are least likely to be included as examination questions.