

Credentialing is becoming more important in many industries, including the energy industry. It is being tied to education, both secondary and post-secondary, grants from the Department of Labor and other sources, Perkins funding, and employment.

CEWD is piloting the Get Into Energy Career Pathways model, including existing credentials and the development of a new credential, with extensive input from both education providers and employers. The goal is for these credentials to be a viable option for energy industry-recognized credentials required by all stakeholders—secondary and post-secondary education, government, the workforce system and employers. The Center will be piloting the model in eight states in 2011 and 2012, with a national rollout planned for 2012.

Credentialing is tied to the knowledge, skills, and abilities, or competencies, for a given industry. CEWD, in partnership with the U.S. Department of Labor, has developed an Energy Competency Model that defines basic competencies, industry fundamentals, industry technical competencies and job specific competencies in eight separate tiers. Tiers 1-4 define the common competencies required for any position in an electric and natural gas utility. Tier 5 identifies competencies that are unique to positions in four industry functions - Nuclear Generation, Non-Nuclear Generation (Coal, Natural Gas, Oil, Hydro, Solar, Wind, Biofuel or Geothermal), Electric Transmission & Distribution, and Gas Transmission & Distribution. Details for Tiers 6-8 define competencies that are specific to individual occupations.

Basic Skills: Tiers 1-3

For basic skills training, CEWD will be using the WorkKeys[®] System, developed by ACT, which assesses academic work readiness skills, specifically reading, locating information and mathematics, resulting in a National Career Readiness Certificate. In addition, there are other existing credentials that cover employability skills that will be recommended, depending on the audience.

Additional employability skills will be assessed using an assessment from SkillsUSA that will result in an Energy Industry Employability Skills Certificate. CEWD has also been working with SkillsUSA to develop an engineering technology skills assessment.

SkillsUSA contracts with Intelitek to create its online skills assessments. The development of the engineering technology skills assessment involved a group of subject matter experts (SME's) who defined the competencies required for engineering technology. The team used information including the job task analysis performed by EEI Testing for the pre-employment tests, the Energy Competency Model and educational learning objectives to define the competencies. The team then created questions to test those competencies - questions related to calculating area, measuring, safety, working as a team, appropriate work behavior, identifying the steps required in design, etc. The team reviewed the completed online version of the assessment, made comments and reviewed the revisions. The assessment was then given to a 3rd party to review (our reviewer was Tom Devine, assistant Dean for Engineering and Technology at Thomas Edison State College). After their comments were incorporated into the assessment, it was launched at SkillsUSA National Competition and is now

available for young people to take. Intelitek will monitor the results of the assessment to determine if there are any ambiguities with the questions/answers.

Three CEWD members are going to be providing a group of students for a "control" test of the assessment. The Gulf Power Academy (Southern Co.), the GA lineworker bootcamp (Southern Co.) and the nuclear technician associate degree program (FPL/IRSC) will give the assessment to their students, get comments back from the students on the test and will provide CEWD with the scores from the test so we can determine if this will be applicable for the GIE Career Pathways model.

Industry-wide and Industry-specific Technical Competencies: Tiers 4-5

CEWD will be developing a new credential—an Energy Industry Fundamentals certificate. This credential will be accredited by ANSI through their Certificate Programs accreditation system.

Occupational-specific Competencies: Tiers 6-8

The credentials recommended for Tiers 6-8 are certificates, college credit for apprenticeships, and post-secondary degrees. These are existing programs that cover a variety of occupational areas, including lineworkers, pipefitters/pipelayers/welders, plant operators, and technicians, the high priority technical positions needed in the energy industry.

