

# Get Into Energy Career Pathways for Skilled Energy Technicians





# Get Into Energy Career Pathways for Skilled Energy Technicians

The Center for Energy Workforce Development (CEWD) has developed the *Get Into Energy (GIE) Career Pathways Model*, a roadmap for entry into skilled energy technician positions in the Electric and Natural Gas Utility Industry. These positions include Lineworkers, Generation Technicians, Transmission and Distribution (T&D) Technicians, and Plant/Field Operators. Details on each of the jobs, along with resources for implementing the pathways models, can be found on the CEWD website, <a href="www.cewd.org">www.cewd.org</a>. Successful implementation is dependent on partnerships between energy companies, educators, and other training providers to ensure that youth, military, and transitioning adults can successfully enter energy careers.

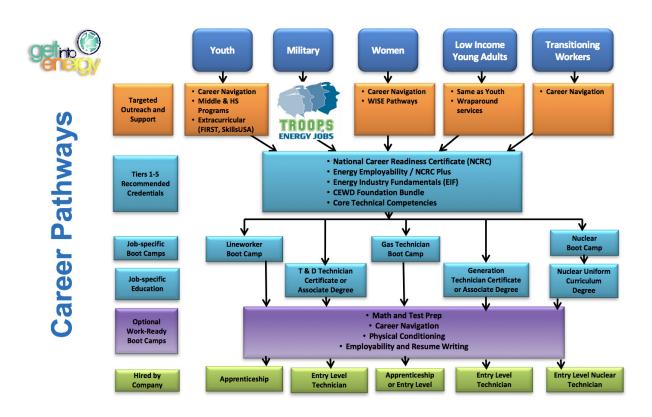
**Pathway to Energy Careers Education:** Preparation Preparation Career to enter Enrollment to to enter job Completion of education: in credential with Interest to Preparation to Labor Market Acceptance **Energy** Selection **Energy and Education Partnerships** 

In general, the GIE Career Pathways Model has three key phases:

- Preparation to enter education: Preparing for and selecting the right education
  pathway is critical for those aspiring to a career in the energy industry. This phase
  covers steps involved in understanding energy careers, selecting and preparing
  for the appropriate education pathway, and ends with acceptance into a program
  of study for a specific job category. Resources for career awareness and career
  navigation range from the Get Into Energy website and career navigation materials to
  the Troops to Energy Jobs website created specifically for transitioning military and
  military veterans.
- Education: Steps in this phase start with enrollment in an appropriate program of study, to completion of defined credential(s) with labor market value. CEWD has defined specific education pathways and the competencies and credentials that will prepare potential applicants for success in energy careers.
- Preparation to enter job market: Upon completion of an energy pathway, candidates move into preparing to enter the job market. This phase may include research into a specific company's application requirements and preparation for pre-employment testing and screening. There are a number of best practices being used in the energy industry to help make this transition successful. These include providing support for pre-employment testing with CEWD's Get Into Energy Math & Test Prep Workshop, using the Troops to Energy Jobs Roadmap for Veterans, or participating in a pre-employment preparation program like Women in Sustainable Employment (WISE) Pathway.

CEWD has focused on five key demographics: Youth, Military, Women, Low Income Young Adults, and Transitioning Adults. For each of these demographic groups, the pathway may look different based on a potential employee's experience and skills. For example, adults may already have the appropriate educational credential and need to focus their efforts on career navigation and preparation for pre-employment screening. Youth will need to navigate the entire education pathway to gain the competencies and skills to enter an entry-level position. CEWD has created resources to support the specific needs of each demographic. Resources, roadmaps to specific jobs, and a real-time job posting website can be found on the Get Into Energy Website at <a href="https://www.troopstoenergyjobs.com">www.getintoenergy.com</a> and the Troops to Energy Jobs website at <a href="https://www.troopstoenergyjobs.com">www.troopstoenergyjobs.com</a>.

The GIE Career Pathways Model starts with targeted career awareness and support and ends with a candidate being hired into a specific job.



### **Targeted Outreach and Support**

The journey on an energy career pathway needs to start with awareness of energy careers. This includes learning about the industry, whether this is through the Get Into Energy website, through an outreach event from a local energy company, or through career fairs focused on a particular demographic like the military. Once an individual begins the journey through an energy pathway, we know that support makes the difference in whether or ot they stay on the pathway. Through CEWD's experience and the extensive research in workforce development, students and other potential candidates need help "navigating" career pathways, which may include utilizing navigational tools such as mentoring or career coaching.



### **Tiers 1–5 Recommended Credentials**

CEWD, in partnership with the U.S. Department of Labor, has developed an Energy Competency Model (full graphic of the model can be found on page 4) 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 T&D, and Gas T&D. The remaining tiers describe occupational-specific competencies.

Potential candidates on an energy career pathway start off earning the same credentials, such as the Energy Employability Skills Certificate and/or the National Career Readiness Plus Certificate, that align personal, academic, and workplace requirements (Tiers 1–3), then the Energy Industry Fundamentals Certificate (Tiers 4–5), which provides a foundation of knowledge about the energy industry and its functions. When Energy Industry Fundamentals is combined with other Tiers 1–5 credentials along with technical math and a career and personal development course, this is called the CEWD Foundation Bundle. Potential candidates who earn a set of core skills more technical in nature, which span Tiers 1–5, can also earn a Core Technical Competencies Certificate. A graphic of these stackable credentials is included on page 4.

### **Job-Specific Bootcamps and Education**

Once these are complete, potential candidates move into the pathway based on their skills and interests, aligning to positions such as Lineworker, Technician (Gas, Generation, or T&D), or a nuclear-specific career, all of which require some type of postsecondary education. Some institutions also offer short-term bootcamps for accelerated skill development.

### **Optional Work-Ready Bootcamps**

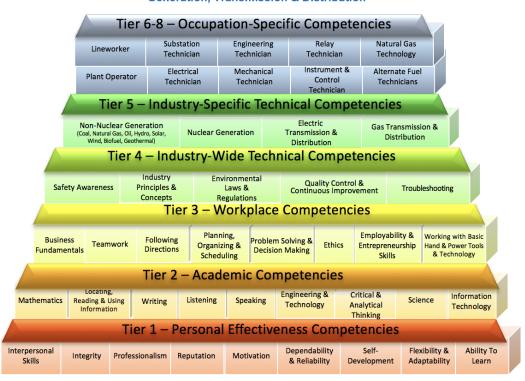
Before applying for a position, candidates may choose to enroll in some type of Work-Ready Bootcamp. As with job-specific bootcamps, they are short-term in nature. However, Work-Ready Bootcamps enable individuals to brush up on general, work-ready skills, such preparing for pre-employment testing, resume writing, interviewing, and navigating one's career. In addition, there are Work-Ready Bootcamps that can provide physical conditioning for those careers more physical nature, such as Lineworker.

### **Hiring by Company**

Depending on the occupation, individuals may be hired as an apprentice (Lineworker or Gas Technician) or as an entry-level employee (Generation, T&D, or Nuclear).

Careers in energy offer viable employment with competitive wages, comprehensive benefits, career advancement opportunities, and the ability to work for a company that values its connection with the community. The ultimate goal of the GIE Career Pathways Model is skilled, dedicated employees who stay in the industry and see their career pathway as just the beginning of a larger journey where they can grow with many opportunities.

## **CEWD Energy Competency Model: Generation, Transmission & Distribution**







### **Stackable Credentials**



Energy Competency Tier Model for Skilled Technician Positions in Energy Efficiency, Energy Generation, and Energy Transmission and Distribution For more information on the GIE Career Pathways Model, stackable credentials, competency models, educational resources, and information on the National Energy Education Network, visit <a href="https://www.cewd.org">www.cewd.org</a>.

Formed in March 2006, the Center for Energy Workforce Development (CEWD) is a non-profit consortium of electric, natural gas, and nuclear utilities and their associations—Edison Electric Institute, American Gas Association, Nuclear Energy Institute, National Rural Electric Cooperative Association, and American Public Power Association. CEWD was formed to help utilities work together to develop solutions to the coming workforce shortage in the utility industry. It is the first partnership between utilities, their associations, contractors, and unions to focus on the need to build a skilled workforce pipeline that will meet future industry needs.

701 Pennsylvania Ave., NW, Washington, DC 20004-2696 • 202-638-5802

www.cewd.org www.getintoenergy.com

For information, please contact us at staff@cewd.org.

