Focus on Workforce Planning

Workforce Planning: It’s Not Just a Numbers Game

By Ann Randazzo

Workforce planning—determining how many workers the energy industry would need, when it would need them, and how it would get them—has been a major focus for the Center for Energy Workforce Development since the organization’s inception.

The problem is never entirely resolved, as workforce planning needs are forever changing based upon numerous factors: the state of the economy; the impact of new technology on staffing needs; mergers and expansions; and shifts in retirement trends, to name a few.

Over the past several years, CEWD has refined the workforce planning process and developed several tools and resources that can help companies clarify their needs and develop appropriate strategies for how to fill them.

It is the “when workers will be needed” piece of the puzzle that really drives strategy. For example, if we say 40 percent of the workforce will retire over the next 10 years, the question really becomes when over the next 10 years. If most will retire in six to 10 years, then strategies for recruiting new workers must begin with students who are now in middle or elementary school, with a major emphasis on those in grades 4-8, because they will be entering the job market at that time.

Strategies at that age level include raising awareness of energy as a career and encouraging teachers, parents, and students—particularly girls—to focus on math skills, so that they develop the confidence to continue with math and other STEM (Science, Technology, Engineering, and Math) subjects as they enter high school.

If most workers will retire in three to five years, however, strategies must focus on those students who are currently in high schools or career academies. Companies may wish to get involved with SkillsUSA and First Robotics or lobby for an Energy Career Cluster to be embedded in their state's Department of Education so that students and teachers understand the appropriate skills needed to work toward a career in energy. With this type of timeframe, energy companies may also wish to start working with local community colleges to create the training programs needed to fill their anticipated job openings.
If workers are expected to retire within the next one to two years, it's too late to start a new program at the local community college. Strategies should focus on raising career awareness among those students already enrolled in associate's degree or engineering programs, providing support services to those students so they can remain in school and apply for jobs, and ensuring that they receive hands-on experience and training through apprenticeships and other programs.

If you need to fill openings now, then your strategy might be to look for candidates who are separating from the military, have already graduated from community college programs, or are otherwise actively looking for jobs.

Energy companies actually need all of these strategies in order to keep their workforce pipeline filled to ensure a steady supply of skilled labor. However, companies often don’t focus on future needs if they are currently not looking to fill jobs. It's important that they remember that while they may not be hiring right now, they will need to hire at some point, and if they don’t take steps to raise career awareness among potential applicants or encourage young people to take the necessary courses to prepare for careers in energy, those workers may not be there for them when they do need them.

What's more, nine percent of energy workers are eligible for retirement today and can walk out at any time. Energy companies really can't stop working on this. They have to keep the workforce pipeline filled so that the supply is there when it's needed.

In fact, the whole point of workforce planning is to balance supply and demand. You have to balance it for your company, for your state, and for specific jobs, because the strategy for hiring lineworkers is different than that for hiring power plant operators and technicians, or even for hiring engineers.

The demand for engineers, in particular, far outstrips the supply and that gap is continuing to grow. There are not enough engineering programs and not enough students in the ones we have. So in terms of strategy, we have to focus on programs that can accelerate movement into engineering positions. For example, by transitioning veterans who already have an engineering degree and can earn a certificate or master’s degree in Power Engineering, or through programs that articulate an associate’s degree in engineering technology to a bachelor’s degree in engineering. In effect, strategies that shorten the time it takes to gain engineering credentials.

It's really critical that energy companies focus on these strategies and not just on the analytics of how many workers will be retiring. The industry is facing uncertainty as never before, and there are some real “game-changers” that could have a major impact on the workforce. The workforce impact of the changing fuel mix, grid modernization, regulation and policy changes, or mergers and acquisitions may make a significant difference in the level, skills, and numbers of positions in the future. All of this must be taken into consideration as we look at strategies to keep the pipeline filled, and how we need to help those potential candidates prepare for energy careers.

**Essential Elements of a Strategic Workforce Plan**

A successful strategic workforce plan should include four key elements, according to David Heler, Strategic Workforce Planning Manager for the Palo Verde Nuclear Generating Station in Arizona. Heler is currently helping CEWD develop tool sets for each of these elements, which include:

- **A strong linkage to the company's business plan**
  Having a clear understanding of the energy company’s organizational direction and objectives allows you to understand future workforce needs and determine the competencies needed to meet those needs. How many types of mechanics, engineers, or electricians will you need? What skills will they need and will those skills change due to changes in technology, such as the development of the SmartGrid? The skill sets workers need tomorrow may not be the ones possessed by the current workforce or applicants, and this must be taken into consideration when planning.
• **Workforce analytics**
Understanding the demographics and analytics behind the workforce is also essential in developing a strategic plan. What is your company’s turnover rate? What is your ratio of new hires to experienced hires? What is your promotion rate, and can you predict movement within the company? How does this impact compensation? This data is needed to show company leaders the impact that potential retirements and long-lead training of new hires will have.

• **Workforce development**
“Many of us are starting to ‘tool up’ our talent, by developing good pipelines for incoming workers through community college and other training programs for technicians, mechanics, operators, and engineers, either at two-year or four-year degree programs,” Heler said. “In the past, where journeyman training might have been sufficient, we now need people with two- and four-year degrees to fill these jobs.” Energy companies must ask: What training is needed for workers to be successful at their jobs? And they may need to supplement the outside training with their own training programs once workers are hired. For example, at Palo Verde, there is a 12-18-month engineering training program for college graduates that gives them experience with equipment they don’t use while in school and exposes them to all types of engineering jobs, helping to match their passions and interests to the company’s needs.

• **Metrics and execution**
“You’ve got to hire,” said Heler. Oftentimes, companies focus on their short-term financial situation and lose sight of their long-term needs. “Don’t lose sight of the fact that it might take three years to train someone with the critical skills your company is going to need in the future,” he advised. Companies need to remember to measure their output and make sure they are meeting their workforce planning objectives every step of the way.

“The purpose of this model is to help energy companies understand the essential elements of a strategic workforce plan,” Heler said. “We’re making good progress on building tool sets for each of these elements, which will be available as PowerPoint presentations and templates energy companies can use to develop their own plans. These should be available by the end of the year,” he noted.

For more information on CEWD’s strategic workforce development tool kits, contact Dana Berkheimer at dana@cewd.org.

### At Dominion, One Size Does Not Fit All in Workforce Planning

Several years ago, Dominion began developing tools that would help define its workforce planning needs and help transfer the knowledge of experienced workers who were leaving to those who were just coming on board. The energy company developed a workforce planning matrix and other tools to assist the business units in collecting data to compare supply and demand and identify critical jobs.

Dominion then reevaluated its overall workforce planning strategy. It revised its workforce planning definition, updated its process model, developed a workforce readiness scorecard, and reviewed strategic external partnerships.

Last year, a workforce readiness enterprise scorecard was developed—based on materials provided by CEWD—that utilized key performance indicators and critical success factors such as metrics on movement (new hires, ins and outs, internal vs. external hires, internships), separation metrics (voluntary and involuntary turnover, retirements), and other metrics that affect workforce trends.
In addition, each year Dominion takes a look at what’s happening outside the company. Questions such as “How do we look compared to the outside world?” and “Where will there be gaps in the workforce pipeline?” are asked and reviewed.

“Tools and resources are developed and then shared with each of the utility’s business units,” said Human Resources consultant Deborah Olson. “However, it is up to each business unit whether and how to use them in developing their workforce planning strategies.”

“We feel it’s vital to have an enterprise-wide review of the overall process,” said Roy Grier, Vice President of Human Resources. “That helps us identify our future needs, keep the pipeline filled, share initiatives and build on those synergies. But we do rely on our individual business units to stay in touch with their own specific needs, which can change from year to year.”

According to Olson, information is shared across business units at the company’s annual workforce readiness review meeting. This allows the business units to talk about what they’ve done so all can benefit when developing successful strategies.

“We review job demand, supply, critical jobs, gaps, share workforce readiness initiatives, and determine what’s needed going forward,” she said. “Each business unit has different needs, so we put the tools and resources out there and they implement them. If a business unit has already developed a successful initiative, others might save time by replicating it.”

The business unit may determine that they need more qualified applicants who can pass certain tests, a more diverse applicant pool, or applicants with a specific skill set. Most of these strategies are set locally by the business unit. However, corporate provides support, such as partnering with local community colleges, developing succession planning systems or employee development resources, sharing forecasting data, and developing overall metrics. At any given time, a variety of workforce planning strategies are being carried out.

Overall, Dominion’s workforce readiness objectives are to:

- Evaluate external and internal supply and demand of people and skills, then create actions to address shortfalls
- Provide critical data to both HR and business unit departments (e.g., Employee Development, Technical Training, Recruiting & Staffing, and Finance) to enable better planning
- Use a unified approach to develop external relationships to aid in creating talent pipelines to enhance its ability to attract qualified, diverse candidates
- Ensure it is selecting from a diverse talent pool internally and externally

Our workforce readiness process is continuous:

- Begin with the business strategies
- Define the needs to support the strategies
- Identify the gaps
- Develop solutions to close the gaps

Solutions may include Hire or Develop Strategies. For example:

- (Hire) Source & Recruit
- (Develop) Manage & Transfer Knowledge
- (Develop) Develop & Manage Employees
- (Develop) Reward & Retain Employees
Troops to Energy Jobs: Workforce Development Programs Train Troops for Energy Jobs at PG&E

Pacific Gas and Electric (PG&E) Company’s PowerPathway—a collaborative workforce development model between California community colleges, the workforce investment community, labor, and industry—has proven highly successful at identifying and training qualified and diverse job applicants since it began in 2008. Today, the program is again proving its mettle by helping military veterans transition to civilian careers in energy.

As of the end of last year, 150 veterans had graduated from PowerPathway’s Bridge to Utility Worker program, and nearly 90 of them had been hired, with most landing positions at PG&E. The program trains military veterans for skilled craft jobs in the energy and utilities industry.

“Entering the program is no guarantee that a veteran will find employment at PG&E or any other utility,” said Yonnie Leung, PG&E’s Senior Manager for Workforce Development, “but clearly, many are succeeding in doing just that. We tell them that completing the program is an added qualification and improves their chances of being hired. In fact, our average hire rate from our military cohort programs is more than 60 percent. In some cases it’s more than 90 percent.”

PG&E is one of six energy companies nationwide taking part in CEWD’s Troops to Energy Jobs initiative, which helps transitioning or retired military workers utilize the training and skills they’ve developed in the armed forces to find jobs in the energy industry.

In addition to its Bridge to Utility Worker program, PG&E is partnering with American River College in Sacramento, California, to enhance a training program specifically for veterans who wish to earn a welding certificate for use in the energy industry. This year-long program, which overlays utility welding training onto an existing welding certificate program at American River College, will kick off in 2013. The program will be paid for by a $500,000 VEAP (Veterans Employment-Related Assistance Program) grant from the State of California, which will also support a seventh military cohort of the Bridge to Utility Worker program.

PG&E is also in the process of mapping military occupational specialties and training directly to utility jobs as a way to help guide retiring and transitioning military veterans into the utility jobs that best fit their prior training. The company will then develop specific training programs to fill any gaps in skills or training that might be needed. “This kind of planning helps us guide these potential candidates into identifying which types of energy career pathways make sense for them, given what they’ve already learned and experienced working for the military,” Leung said.

PG&E Chairman, CEO, and President Tony Earley, a former officer in the U.S. Navy, is committed to hiring veterans returning from service abroad, especially during this time of high national unemployment. He knows firsthand that they possess the skills his company needs—not just technically, but in terms of work ethic, productivity, and loyalty.

For Earley, hiring veterans is not an act of charity, but a smart business move.

“First of all, you get people to the workforce faster,” he said. “If we can save six months getting somebody out in the field, that’s a huge investment. We think we can justify it just as a return on investment.”

For more information about PG&E’s Troops to Energy Jobs program, please contact Yonnie Leung at yonnie.leung@pge.com.
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