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Workforce Trends: What You Can Do Today

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When your organization revisits its strategic plan, often you'll begin by assessing the leading factors helping or hindering your organization's success: market conditions and customers, competition and suppliers, regulation, technology advances, and our fragile economy.



While each factor is important, remember that the energy industry relies heavily on the knowledge and skills of its labor force at all levels. It's also one of the factors you can most control.

Labor market conditions are changing, presenting many new challenges for employers. We believe it is critical that energy employers gain a deeper

understanding of how labor market trends impact their organizations. Moving forward, the challenges associated with recruiting, training and retaining a highly skilled workforce may prove to be among the most important strategic issues facing the energy industry.

Do we really have a problem? There have been predictions of imminent labor

shortages and looming retirements in the energy industry for years, so what's different? There are three main reasons why our energy workforce deserves more thoughtful and deliberate attention:

1 The Recession Created a Mirage

Many Americans are looking for work, and hiring managers are overwhelmed with the number of applicants for each position. The tide of application paperwork may give the false impression that there is a large pool of talent-rich applicants. In fact, a closer look reveals that, while there is not a labor shortage, there is a skills shortage. The vast majority of applicants lack the necessary skills required of these energy industry jobs, many of which are highly specialized craft, engineering, technical and managerial positions across the energy industry, and especially in emerging clean energy sectors. This skills shortage has meant that employers are more frequently looking outside of the energy industry to recruit qualified, experienced personnel; and competing with other industry sectors for the same limited number of skilled employees. Jobs remain open longer, and, in a tight skills market, organizations must adjust their expectations.

The search for entry-level new hires is also elusive, as many energy employers continue to experience great difficulty finding applications with the basic prerequisites needed to fill openings in trainee positions such as apprenticeships. For example, over the period 2008 to 2011, Puget Sound Energy (PSE) has conducted a series of recruitments for its five apprenticeship programs. PSE looked specifically at these apprenticeships because they represent critical skills and functions that affect system operability and reliability.

As shown in the graph on page 16, there was a high rate of attrition between the initial application process, to a final pool of qualified applicants who could pass the company's required apprenticeship aptitude testing. The initial screening eliminated nearly two-thirds of applicants, and among the remaining qualified

applicants, 741 (60 percent) failed to meet testing standards. Thus, of the 3,674 initial applicants, only 14 percent completed the evaluation process and successfully passed the algebra and reading tests.

Skill gaps are not limited to apprenticeship applicants. Like many utilities, PSE also has experienced difficulty in hiring engineers, especially those with relevant work experience. Entry-level engineers have been more readily available due in part to the economic downturn; it's at the 5+/- year experience level that big gaps exist, especially for electrical and mechanical engineers, and other speciality areas. As the economy recovers, utility managers are concerned that gaps at the entry level will grow through succession, as senior engineers transition into retirement and organizational restructuring.

2 There is a Looming Retirement Backlog

Just a few years back, a number of reports claimed that up to 50 percent of utility employees would become eligible for retirement early in this decade. The graying of the energy workforce received much attention until the Great Recession, as those who were eligible for retirement saw their investment portfolios take a deep dive. This caused many senior employees to postpone their retirement plans. While retaining highly skilled workers proved to have some short-term benefits for many utilities, these delayed transitions reduced the number of opportunities for internal promotions and entry-level new hires. In the meantime, the number of employees who are eligible for retirement continues to grow, and it remains to be seen whether the energy industry will experience an even larger exodus of skilled workers once the economy recovers. It may be that the recession has exacerbated the retirement problem, or at least rendered it far more complex than it was before the economic decline. A recent energy policy report suggests that the labor and skill gaps due to retirements will continue to challenge the industry.

Not only is the exodus of retirement-age employees likely to be disruptive, it will also create a "brain drain" of much-needed skills and experience that could take years to recover. Compared to a more orderly pre-recession retirement scenario, replacing the knowledge and skills of retirees is likely to require ever-larger investments in education and training for new and existing employees, to ensure that they are as skilled and productive as the retirees they replace.

3 Recruiting and Retaining Younger Employees

Potential employees under the age of 30 have work values, attitudes and preferences that have been shaped by new technologies, an appreciation for social and environmental issues, and uneven economic conditions. They are coming from crowded, diverse schools that focus on test scores, senior projects and community service. This is a demographic that is tech savvy and expects to have choices. They are uber-consumers who were raised in an era of super-customization.

It's important to consider the impact that the experiences and values of this future workforce will have on the career and workplace expectations of this pool of potential new employees. They seek employers that value their input,

provide flexible work environments, provide ongoing learning opportunities and access to the latest technologies. CEOs and managers would benefit from taking a look at their organization's culture to see if it offers an environment that will attract and keep the youngest and brightest in the job market. In an economy that so direly needs new ideas and innovations, competition for these young stars is heating up, and flexible, option-rich organizations are those that are most likely to win the race to attract and retain this new generation of talent.

What Can You Do Today?

Recognize the demand for new, more extensive skills. As grid modernization initiatives move forward and more renewable energy sources come online, most energy employers will need a broader skill set than in the past. Even though technical skills in the trades may not be so different from traditional ones, both blue-collar and white-collar workers will be expected to have a broader range of skills and knowledge specifically related to technology, communication and data.

Identify the skill sets of the future.

Scan recent studies and talk with leading experts to get an idea of the skills that will be needed to move your organization successfully into the future. Some of this work is already underway.





For example, the Department of Energy has awarded a \$5 million grant to the Pacific Northwest Center of Excellence for Clean Energy to work on Smart Grid Workforce Development. In addition to developing an online portal for training, the project is developing Skill Standards for Customer Service Representatives, which will provide a framework of the critical work functions and key activities for this occupation. This can be used by employers, trainers and educators to develop the training needed to ensure that Customer Service Representatives have the skills they need to succeed.

Develop a deliberate strategy to infuse and transfer employees' expertise into your organization.

In an effort to prevent "brain drain," employers are implementing a variety of strategies to capture employee knowledge. Many craft-oriented work environments rely their employees' "tribal knowledge" of work tasks and operating processes, which typically gets transferred from seasoned workers to

new workers informally; this occurs in engineering and managerial occupations as well. Written operating procedures can help capture and codify tribal knowledge, as well as the methods and practices of the operation before it walks out the door. The principle of "do what you say" and "say what you do" is becoming more important as the energy industry faces stricter and more in-depth regulation, such as the implementation of "Systematic Training Systems" initiatives by the National Energy Regulatory Commission. For all key occupations, utilities and energy service companies should prepare for employee transitions by being deliberate about documenting critical work functions, key activities and procedures, and key work elements that also form the foundation for employee training and succession. Other practical steps include:

- **Hire replacements early enough** to allow for cross-training to limit the disruptiveness of losing someone with years of experience.

For example, Puget Sound Energy will hire two entry-level associate engineers, and pair them with mentors to increase bench strength and to help with knowledge transfer.

- **Conduct exit interviews** with retirees to document their skills and to determine their willingness to come back on a part-time or project basis to ensure that their expertise remains within your organization's network.
- **Have senior staff provide input** on new employee orientations and training development to capture expertise and incorporate it into the organization.

Build and leverage community partnerships. Connect with local economic development initiatives and education institutions to engage in building a pipeline of future workers with the skills needed to move your organization into the future. Partner with regional colleges and universities to tap into new technology trends. This will:

- Help shape new education and training opportunities for employees to get the new skills they need; and
- Identify the benefits for both companies and colleges by leveraging the knowledge, skills, technologies and facilities that neither party could provide on their own.

Part of building a long-term pipeline of new talent means reaching out to local, regional and state K-12 organizations to provide input on industry's need for academic and applied knowledge and skills. Of special value are initiatives that emphasize the importance of science, technology, engineering and math (known as STEM) in K-12 curriculum and assessments.

Talk with new and potential employees. An intentional strategy of listening to new and potential employees can help you identify what changes your organization can make

to be more attractive to potential employees. You may be surprised by how much more you may hear about learning opportunities, dynamic organizations and flexibility than money and benefits.

A skilled workforce enables productivity and growth, and the availability of a well-integrated education and training infrastructure is essential to your organization's future. Take time now to make sure that your strategic planning includes a specific focus on your workforce. Thoughtful planning and action now will help ensure that your organization and your employees continue to prosper for many years to come.

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