



DEMOGRAPHICS STILL DRIVING

GREAT SHIFT CHANGE

BY DAN LARSON • FOR ENERGY PIPELINE



ONE YEAR ON AND THE GREAT DEFLATION NOW TOUCHES NEARLY ALL OF THE UPSTREAM OIL AND NATURAL GAS INDUSTRY

As activity slowed and companies made cuts, tens of thousands of lost jobs took with them promises of rewarding careers and aspirations of personal success.

The rigors of a vastly changed energy landscape forced companies to raise lowering costs to the highest priority and workers at all stages of their careers to rethink choices and goals. For an industry that produces optimism by the barrel, both companies and workers find themselves hunkered down and doing what has to be done to get by until things turn around.

The latest estimates show some 122,300 U.S. energy sector jobs lost since prices fell by more than two-thirds in the past year. Not surprisingly, the average salary paid oil and gas workers also has taken a hit. Year-end reports by the federal government show average industry wages at \$26.72 an hour, down 1.5 percent from a year earlier.

BAD NEWS BEARERS

The oil price crash has driven the loss of 275,000 jobs worldwide, according to one industry analyst. Since late 2014, companies have cut spending by more than \$100 billion, a tsunami felt broadly across the oil field services and supply sector, according to Graves & Co., an energy transaction firm based in Houston. Nearly four of five jobs lost so far have been in oil field services, the firm said.

With a further drop in crude oil prices in January, sentiment among the financial punditry favors 2017 as the earliest a meaningful recovery could get underway.

In the meantime, the current price downturn is seen as going deeper than the 1986 price collapse. There are, however, big differences this time around, say industry executives and market analysts.

Companies are using the slowdown to add depth to their knowledge base with modern data analytics that help pinpoint where the resource is and how to recover more of it. The days of kicked rocks, crossed fingers and dry holes are gone.

There also is another important difference in the current stage of the commodity price cycle.

Many oil companies and oilfield servicers recognize it would be a disaster to repeat the moratorium on hiring young engineers and scientists that occurred following the mid-1980s price collapse. The sharpest companies remain interested in finding and developing talented, determined students and recent graduates.

"Twenty-five years ago, the majors stopped hiring at the university level for eight years," commented Steve Morse of Russell Reynolds Associates, an executive search firm. "They saw the long-term damage it did to their workforce. Two decades later they woke to the realization that their best executives were

all approaching retirement age, with too few mid-career execs being groomed to replace them."

At the other end of the demographic spectrum, Morse advised that with oil and gas activity focused on shale plays, older workers can still find job openings in mature, conventional fields. A recent influx of private equity capital in conventional plays has created opportunities for experienced engineering and managerial talent, he said.

Locally, the slowdown in the oil and gas sector has not slowed activity in other industries, according to Doug Thorner, managing director at Sound Advice Consulting Services in Denver. "The reality is that the oil and gas industry is going slowly right now and will not pick up again for awhile," Thorner said. "On the other hand, the rest of economy along the Front Range is doing better than OK."

With two decades experience in recruitment and placement, Thorner says he has seen how the cycle of economic activity turns from one industry to another. "Four years ago, the phone was ringing off the hook with people looking to move from other industries into oil and gas. Now, companies in aerospace, technology and construction are looking for talented engineers, for finance and accounting professionals, and sales people from oil and gas."

Here again, age and experience can work against many professionals looking for their next opportunity. "Companies looking to fill positions will look at younger candidates first," commented Thorner. "The person with 20 years in one industry is often perceived as too expensive and set in their ways."

Thorner also worries that the industry will again experience a knowledge gap when activity ramps up with higher prices. "The small to mid-size independents are the ones that do most of the hiring when the industry is expanding," he said. "But it's the majors and big service companies that do the most valuable training and their programs are under pressure like everything else."

FLEXIBLE AND MOBILE

In addition to sniffing out openings in hidden corners of the industry, older oil and gas pros are advised to look for ways to align their skills with the needs of other industries. “The best advice for anyone looking beyond their industry is to be flexible and mobile,” said Thorner. “There might be a civil engineering job they are qualified for in another part of the country. Oil and gas people are used to relocating, much more than those in other industries.”

Similar advice is offered to younger workers but with more emphasis on being flexible. At the student level, aspirations of a career in petroleum engineering might give way to other disciplines in response to the lack of openings. Recognizing how skills transfer is the key, say college advisers.

For younger workers, over the coming decade the oil and gas industry will see dramatic changes and unprecedented opportunities.

Addressing early-career engineers, the leader of the industry’s professional engineering organization said that in light of current conditions, “most of you will keep your jobs; however, your jobs will most surely change.”

“As the most senior professionals reach retirement age in the next five to 10 years, you will have opportunities for increased levels of responsibility that no previous generation of engineers and earth science professionals has ever enjoyed,” said Nathan Meehan, president of the Society of Petroleum Engineers.

The demand for workers trained in science, technology, engineering and math (STEM), even those without a higher education degree, is predicted to grow.

International oil major BP predicts that by 2018, more than 8 million STEM-related jobs will be available in the US with an average salary exceeding \$90,000 annually.

And while proficiency in one of the STEM disciplines is often seen as requiring a bachelor’s degree or higher, many jobs that require STEM skills do not.

According to research by the Brookings Institute, an economic policy think tank in Washington D.C., half of all STEM jobs in the US are held by workers who do not hold a STEM bachelors degree. Those jobs also pay a

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higher average salary than jobs in other fields that similarly do not require a college degree.

Education, whether it is through high school, vocational or college, is only part of the story of how the oil & gas industry and others are being changed by the makeup of its workforce.

Industry slowdown or not, every flip of a calendar page brings older workers closer to retirement. The Pew Research Center estimates that 10,000 Baby Boomers reach retirement age every day. As they leave the workplace, they are replaced by workers younger than ever.

A NEW MILLENNIAL

Like the back of a camel, a chart of US population shows the two largest demographic groups are Millennials on one side and Baby Boomers on the other with Generation X stuck in the middle.

There are 83 million Americans born between 1980 and 2001, the Millennials, and 76 million born between 1946 and 1964, the Baby Boomers. Generation X, those born between 1965 and 1979, number 65 million and are expected to surpass Boomers in numbers by 2028. At the end of 2015, the US Census Bureau said the total population of the U.S. was 323 million.

Until the Millennials came along, Baby Boomers were considered the most studied generation in American history. Now,

marketers and academics argue over whether Millennials are similar to the mid-century Greatest Generation or unique and defy characterization.

Most often, members of this generation are considered to be tech savvy and entrepreneurial, and considerably more diverse and optimistic than either preceding generation. As workers, they are also described as overindulged with an abrupt style of communication and a sense of confidence bordering on entitlement that can confound older managers.

Younger workers are also described as seeking meaning in their work that surpasses higher pay or a career path. Studies report that most Millennial workers consider productivity and not time spent as the best measure of success.

From the other perspective, Boomers in the workplace are seen as expensive, resistant to learning new skills and to change in general, and seemingly always two versions behind on technology.

While it is understood that either generation has different styles of communication, the importance of continuous and open communication is seen as a key in getting the two to form productive work relationships.

“Two-way teaching and learning is expected,” notes Nathaniel Koloc, co-founder of ReWork, a recruiting firm with offices in Denver and Boulder. “When uncertainty is high and team members are unsure of the right course, Boomers provide context based on their experience while Millennials bring conceptual models, software and web tools. Together, they can make great teams.”