

Young people with passion – that is the future of nuclear power

We talk a lot about the merits of nuclear power in this blog. From economics and reliability to environment, we focus on why nuclear is now and should be an essential part of our future energy mix. But how do we get there? Again, we often talk about the challenges associated with public acceptance and how we can better position nuclear as the energy solution we all know it is.

But today we want to focus on something different. People. We have been privileged to work in this industry for more than 35 years. Often it's hard to believe that this much time has passed since we were so excited to start our first jobs as a young engineers working on nuclear safety. Over the years there have been many challenges as the industry slowed, in part due to the accident at Chernobyl, in part due to the slowdown in energy demand growth in many industrialized countries, to the challenges of building capital intensive large projects into deregulated markets. But one thing has not changed; our passion for the industry – our passion for making the world a better place with clean reliable economic nuclear power. And we are not alone.

At a recent industry event, I spoke to many of our colleagues, many of whom have come out of retirement again and again simply because their passion for nuclear power as a solution to meeting our ever growing energy needs is simply impossible to extinguish. Some are well into their 70s and their enthusiasm is as strong as when they were in their 30s.

With nuclear power growing once again, it is time to ensure its continuity by instilling this passion into a new

generation of young people. It is the fuel that will ensure the industry continues to be innovative and reaches its full potential going forward. That being said it is important to focus on what is important to this new generation of engineers and scientists; what will keep them enthused and committed. It is hard to imagine millennials thinking of utilities or large industrial companies as the growth companies of the future. Rather they think of companies like Google, Facebook and Uber when it comes to large innovative exciting companies – or they believe in being entrepreneurs and starting their own tech start-up. This ad campaign by GE (one example below) is a brilliant one as it tries to show young people that it can indeed be exciting to be in this large industrial company – that not everyone has to be coding and developing the next app that puts hats on cats – but that to truly change the world, it is the future of things like transportation and energy that really matters.

I love it (There are a series of these ads, just go to YouTube and you can see more).

In the nuclear industry we have the problem of a gap in age. There are many people in their 50s through to retirement age that have been in the industry for decades, and then there is a new cohort of young people who have joined the industry in the last 10 years or less. This new young cohort has different work expectations than the older group. They expect to be able to find a place and make a meaningful contribution in a relatively short time. They are impatient and expect to change jobs many times in their career. They do not expect to join one company and stay there until they retire.

Yet we are an industry that believes that it takes years to learn and become an expert. We need people with 10 years plus experience and we need experts who continue to grow as they gain the experience needed to make a difference.

Therefore, as industry leaders we need to understand and address the desires and concerns of those just starting out. We need to remember that 30 years ago when we were younger we quickly developed into experts as new techniques were established and we did not have the benefit of people like us to show us the ropes. We were at the leading edge and we loved working in this exciting young industry. We learned on the job. We were excited with every opportunity and put our best into developing a product that we strongly believed in. These are the conditions we need to replicate for this next generation. We need to ensure they are actively engaged, play a strong role in new projects and in innovating as the industry moves forward. We need to provide them with the opportunities they crave to develop their passion for this exciting industry. Competition for these people will be fierce and we need to show that the nuclear industry is where they can truly make a difference in the world.

Sometimes as conservative engineers, or as some of the anti-nuclear activists may state – that it is not fair to leave problems for future generations to solve; we need to push back. As one quite learned colleague once said, why solve every issue – we need to leave some things for the bright young people following us to solve – because they will be smarter than we are and bring new thinking to old issues.

While many think the future of nuclear power depends on public acceptance, or solving the waste issue, or improving nuclear safety; it actually depends on building a passionate next generation of young people to take it in directions that none of us has even thought of yet. Life is about passion – so let's all work to bring out the passion in a new generation of nuclear people. The future is open to us – but only if we can attract the best and brightest people needed to make it happen.

If you are under 40 and have read this post – please comment explaining why you are passionate about working in the nuclear

industry.