



# Competing for the New Workforce (Part 1): New Challenges, New Requirements

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September, 2013

Meet the Author:

An IEEE Fellow, electricity industry visionary, and leader, Dr. Mani Vadari delivers strategic services to a global set of utilities, vendors, and service providers seeking deep subject matter expertise in setting the business and technical direction to develop the next-generation electric/energy system. As a Business Architect, Dr. Vadari has been delivering solutions focusing on Transmission/ Distribution/ generation operations, Energy markets, and Smart Grid for over 35 years. In addition, he is an Adjunct Professor at Washington State University and an Affiliate Professor at the University of Washington. He has published two popular books, "[Smart Grid Redefined: Transformation of the Electric Utility](#)" and "[Electric System Operations – Evolving to the Modern Grid, 2nd Edition](#)", in addition to over a hundred industry papers, articles, and blogs. His books are serving as textbooks at several universities in the US and around the world

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**Ask any utility employee where he or she will be in five years and fully 40 percent of them will give you the same answer—retired!**

*Like so many Baby Boomer-powered industries, utilities are looking over the edge of a precipice. Huge numbers of experienced workers—infused with vast operational knowledge—are planning for a new life filled with golf, cruises, and community volunteer projects. Exacerbating this is a host of market factors that further constrain the supply of younger and more tech-savvy workers who could replace them.*

*New technologies are flowing into utilities at unprecedented rates and utility automation levels have been rising steadily over the last few years. The new technologies are also invading non-operational areas like field force automation, customer segmentation, and even online asset management.*

*Practically every utility is trying to do more for less, driving the need for still more automation and new technologies. The customer base is pushing this change, too. Integration of microgrids, distributed renewables, net metering, time-of-use billing structures, and demand side management all push the envelope of infrastructure that needs to be developed to support the changing face of generation while the demand side still acts at its pleasure.*

*To cope, the utility worker of the future will need to be technology-enabled and equipped with new assets and tools to support the necessary changes. This will, in turn, allow utilities to benefit from the decades of operational experience that will now be available at a moment's notice—in the control center and the field—as advanced visualization techniques allow workers to perceive network behaviors in entirely new ways. The downstream impact is that workers will be better able to deliver value to the customer and to other external stakeholders.*

*But competing for this tech-savvy talent puts utilities in competition with everyone from hardware manufacturers to software companies to exciting Internet start-ups. That makes the talent marketplace a brave new world, too. Look at the situation from the candidate's perspective. If you were a 22-year-old engineering or IT graduate, where would you rather work? For the old-guard electric utility where mom-and-pop served 40-year careers modulated by public utility commission actions and severe weather episodes? Or for some high-tech playground like Apple or Google with on-site athletic facilities, flexible work hours, and stock options that could prove incredibly lucrative?*

*A sobering thought. A formidable challenge. But utilities have been wrestling with seemingly insurmountable change in some respects throughout their existence. The key is to recognize the need for transformation, pursue the opportunity strategically, and provide the opportunities to attract the right talent.*

**What's your plan?**