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N.C. Energy and FutureWork: Top Sector Priorities

As I discussed in my November and January newsletters, North Carolina’s utility model is changing in profound ways. Customers are more engaged and new technologies are enabling them to manage their own energy consumption. Shifts in the cost of many energy sources allow generation to be built closer to where it is used. With the policy environment ripe for clean energy deployment, over the past eight years North Carolina’s clean energy industry has gone from 2,000 employees to 20,000, which represents the state's largest and most diverse manufacturing job growth during that time.

The sector’s legacy workforce is also poised for big changes. North Carolina soon will be hit by a wave of retirements within Duke Energy. Throughout Duke Energy’s operations in North Carolina, South Carolina, Florida, Ohio, Kentucky, and Indiana, 50 percent of current employees are eligible to retire in the next 10 years. Duke will need thousands of new line workers, engineers, and power plant technicians to take their places. Duke also will confront a growing need for employees who have expertise in information technology, cyber security, and data analysis.

All of these issues were front and center at a special energy sector “Leadership Hackathon,” one of five such sector-focused sessions that highlighted Day Two of the last week’s 31st Annual Emerging Issues Forum, FutureWork. At the energy session, more than 75 sector leaders and other

FutureWork Forum: An Exclusive Recap

Did you miss the 2016 Emerging Issues Forum, FutureWork? Don’t fret - you can watch the Day One livestream from the Raleigh Convention Center here. For Day Two coverage, read the Twitter archive here.

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Did you attend the FutureWork Forum, in-person or virtually? Take our post-forum survey, and provide valuable insight to help us improve the Emerging Issues Forum for the future!

The FutureWork Forum in Photos!

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stakeholders wrestled with the following question: “What can North Carolina do now to ensure the right mix of new employees given the utility business model changes?” Four panelists offered comments: Rob Manning, Vice-President, Transmission Power Delivery and Utilization Research, Electric Power Research Institute; Ivan Urlaub, Executive Director, North Carolina Sustainable Energy Association; Andre Pettigrew, Clean Economy Consultant; and Chris Hage, Lead HR Consultant, Workforce Strategy, Duke Energy.

After panel comments and a lively Q&A, the full group collaborated in developing the following three responsive strategies to ensure that the sector can meet its future employment needs:

**Strategy #1: Develop a Vision for North Carolina’s Energy Economy**

Stakeholders were unanimous that the development of a vision was crucial before considering any workforce development strategies. North Carolina has many assets to draw upon in its development. First, the state is home to the nation’s largest utility, and Duke Energy can convene appropriate stakeholders. Second, North Carolina has world-class universities with research and development expertise and the potential for energy innovation to create solutions beyond what is presently available. If North Carolina successfully develops an energy economy vision, there will be bipartisan state-level support, a culture that attracts companies and talent to realize the vision, and a healthy and strong utility environment. Once North Carolina develops an energy economy vision, then the state is in a position to develop the appropriate workforce for the industry.

**Strategy #2: Enhanced Career Pathways**

An enhanced energy career pathway would consist of a two-year community college curriculum, backed by local businesses, with portable and stackable certificates. The degree would include a technical
certificate with broad energy industry fundamentals in year one, plus a flexible choice in the second year of a specific energy career path, such as line technician, gas plant operator, renewable energy technician, wind technology specialist, and a host of other options. This broad approach protects the community colleges and utilities from overinvesting in programs in situations where jobs aren’t going to be available when students graduate due to the ebb and flow of hiring needs.

The community college system is an obvious asset in this effort, as are existing training programs within businesses. Another critical asset is the collective expertise of retiring Duke Energy employees. To the extent that they can teach or share their knowledge with a younger generation, the better off that new generation of workers will be.

**Strategy #3 – Project-Based Learning**

Project-based learning through local graduation project and/or summer internship opportunities is another way to provide students with exposure to the energy industry. Existing assets to help move this strategy forward include STEM summer camps, service learning programs in some middle and high schools, and high school capstone projects. Success for this strategy is measured in the independent, innovative future workforce and the lack of fear of failure for future energy employees.

North Carolina is at the cusp of a major shift in the utility business model, and the sector faces an impending wave of retirements. If we have the vision and the right strategies to tackle this problem now, then the state will be a model for the country in solving the energy sector’s FutureWork challenges.

Best,
Diane Cherry

**A special note from Diane:** As many of you know, after an immensely rewarding decade with the Institute for Emerging Issues, I have recently accepted an exciting new opportunity with the North Carolina Sustainable Energy Association, where I will continue my very passionate engagement with energy issues so crucial to North Carolina’s energy and environmental future. I look forward to staying connected with all of you. -- Diane

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