ISGT 2014 Panel Sessions on Education and Workforce Development

Education and Workforce Development – Part 1. Industry Perspective
Thursday, February 20, from 1:00 – 2:30 p.m.
Chair: Kenneth J. Lutz, Ph.D., AMR Strategies LLC

The increased reliance on new smart grid technologies will require a workforce highly trained in disciplines other than the traditional electric grid technologies. These disciplines include wireless and wireline communications and information technologies, both hardware and software. Utility engineers will have new and broader responsibilities in selecting the best technologies across all these areas and designing and deploying new smart grid systems and applications. Other technical expertise will be required in areas such as cybersecurity and interoperability, areas which may likely require utilities to establish testbeds before deployment. Utility technicians will need training in installing and maintaining new smart-grid systems and components, from sensors and phasor-measurement units to wireless communications systems. In addition, new operational processes will have to be developed to take advantage of all the applications that the new information technologies bring.

This panel session will highlight these challenges from an industry perspective. Panelists will discuss the changing needs of the industry and the education and training programs they have instituted and will institute to address those needs.

1. Mani Venkata, Alstom
2. Sunil Pancholi, Lockheed Martin Corporation
3. Bruce Hamilton, Smart Grid Network
4. Conwell Dickey, Front Range Community College
5. John McDonald, PECO

Education and Workforce Development – Part 2. University Perspective
Friday, February 21, from 1:00 – 2:30 p.m.
Chair: Leonard J. Bohmann, Ph.D., Michigan Tech University

The increased reliance on new smart grid technologies will require a workforce highly trained not only in the traditional electric grid technologies but in communication and information technology disciplines as well. Power industry professionals will need to be well versed in the hardware and software of wireless and wireline communications and the associated information technologies needed to build the interactive, flexible, and self healing grid of tomorrow. Utility engineers will have the added responsibility of selecting the best technologies across all these areas and designing and deploying new smart grid systems and applications. Other technical expertise will be required in areas such as cybersecurity and interoperability, areas which will likely require utilities to establish testbeds before deployment.

This panel session will highlight the response to these challenges from a university perspective. Panelists will discuss how universities need to change in order to address industries changing needs and the new programs that have already been developed to begin to address those needs.

1. Marija Ilic, Carnegie Mellon University
2. Bruce Mork, Michigan Technological University
3. Mesut Baran, North Carolina State University
4. Vinod Namboodiri, Wichita State University
5. Pete Sauer, University of Illinois