

**Smart Grid - US Approaches and Concerns****Wayne Manges*****Program Manager - Oak Ridge National Laboratory******ISA100 committee co-chairman***

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**Key-words:** *Smart grid, advanced communications technology, US government, wireless, cyber-security*

No one really knows what the future of the electricity generation, transmission, distribution and consumption infrastructure looks like, but we know it will be called "Smart Grid". Many of us have been involved in previous incarnations at earlier times, but with the \$4.2B(US) investment, the US government is expecting significant impact, this time. Likened to the US interstate highway initiative in the 1950s, many of the benefits are expected to emerge only after ubiquitous deployment.

One thing is clear: the Smart Grid will involve the deployment of more advanced communications technology than any previous efforts. Many issues are being considered including distributed controls, user interfaces, third party roles, information access, as well as grid resiliency under stress. Wireless is only one of the enablers for addressing Smart Grid issues but clearly an important one.

This presentation will focus on major Smart Grid activities in the US and the expected roles for wireless and cyber security technologies available or emerging.