

The Smart Grid Meets the CE Industry: Opportunities and Challenges

The Smart Grid meets the CE Industry breakfast, held on January 7 at CES 2010, brought together leaders in the industry and on the stage to discuss issues related to the pace of change for the smart grid roll-out and how consumers are a crucial piece to the successful adoption of the grid.

The panel started with some key observations from Jesse Berst, who compared the upgrade of the grid to the upgrade of other major infrastructure networks like cellular and the Internet. All these networks have advanced devices, two way communication and advanced control. What we are facing is a new era in both energy management and customer education. And the business opportunities abound in helping utilities and consumers understand and manage energy flow.

Utilities are grappling with how to adapt to the smart grid. The policy initiatives are in place and moving companies forward but the grid needs automation from start to finish. There is a bit of clash of cultures between older utilities and the push for the new, making the upgrading of the grid challenging according to **Steve Hauser**, VP Grid Integration for the National Renewable Energy Laboratory.

When it comes to utilities, the deregulated world is different from the regulated one – business needs are different. Energy companies in the deregulated world feel a stronger sense of urgency. They are competing for customers, even if that means helping them spend less on energy according to **Patrick James**, Director Smart Grid Technologies, TXU Energy. And they are constantly looking for ways to help consumers see the value of energy monitoring and participating in their smart grid initiatives.

The theme of consumers and how they think about energy was prominent on the panel – 70% of consumers with programmable thermostats don't use them even though they could save significant money. Any new device has to be incredibly easy, convenient, and interactive to keep consumers engaged, according to **Patrick James** and **Will West**, Chief Executive Officer, Control4.

Policy and consumer awareness are driving CE companies such as Pioneer to test out ways to change the way products work in a lower level energy mode. Different compression, lower back light on screens, elements that don't shift the entertainment experience exponentially but have the potential for savings for consumers are what they want to achieve. Additionally, being able to use control products to react to the Smart Grid helps CE devices work well with the home. But these new energy savings modes need to be transparent to the consumer. Everyone on the panel agreed with **Chris Walker**, Sr. Manager Product Planning, Pioneer Electronics on this point!

Best Buy as the retail face to many consumers is expecting the next few years to be a time when education of the consumer is most important. "We believe that over the next few years consumers will be increasingly confused" said, **John Preiner**, Director of Merchandising, Magnolia Home Theater

at Best Buy. The role of retailers and consumer facing groups is to help consumers sort through their options and provide clarity.

Julie Jacobson of CePro raised the question of the growth of an entirely new channel to meet this demand. Panelists felt this would be organically added to current consumer channels.

Will West quoted some substantial numbers - There are 290 terawatts of energy used on electronics in the US, 160 of that is used in the home. "We aren't going to solve the problem without the consumer," he said. In home devices that can help consumers understand their energy usage and connect to the smart grid are coming to homes today – through retail distribution of measurement and monitoring, purchase of other items that have this technology already embedded and through utility programs. But we have to keep it easy and we shouldn't expect consumers to change their lifestyles. "If we can actually help them save energy AND make their lives more comfortable, we've got something."

Quote that sums up the panel: "I drank the koolaid again! I really think the smart home is here. I think there's an appetite for it now." Patrick James, TXU