



Media Contacts:
Adrienne McGarr
Ruder Finn for IEEE
312-329-3907
mcgarra@ruderfinn.com

Fran Tardo
IEEE
732-465-5865
f.tardo@ieee.org

IEEE Members Tackle Smart Grid at 2009 FORTUNE Brainstorm: TECH
Key industry thought leaders discuss making smart grid a reality

PISCATAWAY, N.J. – August 4, 2009 – IEEE, the world’s largest technical professional association, served as Program Partner at FORTUNE magazine’s prestigious FORTUNE Brainstorm: TECH last week in Pasadena, California. As part of the conference, several IEEE members, including IEEE Fellow Saifur Rahman and 2007 IEEE President and Purdue Dean of Engineering, Leah Jamieson, as well as IEEE Fellow and GE Energy T&D Marketing GM John McDonald, served on a panel discussing “Smart Grid: Making it a Reality.” The high profile panel of experts discussed the next steps the power and energy industries need to take to ensure the viability of the world’s energy grid. IEEE has played a leading role in the launch of the smart grid by working collaboratively to set proper standards for implementation, and by working closely with organizations around the world to ensure total interoperability.

Key takeaways from the panel include:

1. For the smart grid to be a reality, we need smart citizens, a smart planet and smart regulations.

The smart grid starts at the power plant and ends at the user, and everything in between must “talk” to each other. The smart grid is more than mere metering. Every aspect of the smart grid is part of an overall plan and can’t be viewed as an individual investment.

The panel also found that standards are the linchpin to bringing together all necessary entities, so that all of the various groups can work together to drive the smart grid initiative – one goal, one vision. Cost-effective technology, technology standards, technology interoperability and incentives for home owners are what are needed to take advantage of the smart grid.

“Collaboration is imperative in order for this initiative to succeed, both in the U.S. and abroad,” said Leah Jamieson, 2007 IEEE President. “IEEE is perfectly suited to drive this conversation, having brought together academia, government and the private sector to establish technology standards and drive technology innovation for the betterment of humanity for more than a century.”

2. The smart grid needs to bring together the information infrastructure and electrical infrastructure.

One of the key challenges for the successful smart grid implementation is to get the electric operations groups and IT teams working together. Valuable data can be captured that will have enormous benefit for the utilities if managed and utilized efficiently. The panel concluded that it is imperative that the two entities work together to marry the electrical infrastructure and information infrastructure. In order to do this, utilities must establish smart grid steering committees that can take a holistic view.

“The smart grid is an essential piece of the planet’s energy future. It is paramount to energy independence, reducing green house gases and migrating the population to energy efficient vehicles,”

said John McDonald, IEEE Fellow. “The smart grid will create a central platform enabling new technologies such as wind farms, solar panels and electric vehicles to ‘plug in’ to the power grid.”

3. Consumers need to truly understand the benefits of smart grid.

At this point, consumers in the U.S. do not interact with their energy. They do not know how to manage it beyond paying their bill and monitoring their usage patterns. In order for consumers to proactively take advantage of the smart grid, they must understand how to harness technology benefits involved and make adjustments to their power usage. This will save consumers money and help alleviate the worldwide energy crises by reducing energy consumption.

Consumers need to learn all they can about the smart grid so that they can reap as many benefits as possible from more efficient energy utilization. People need to be informed about their energy usage and its impact on the environment. Most importantly, they need to understand how monitoring and controlling their energy use will save costs.

Additionally, the smart grid can prevent and remediate problems, such as brownouts and blackouts, by isolating the issue. Utilities can be notified as soon as an energy issue arises, with pinpoint accuracy as to the nature of the problem, so it can be resolved promptly. This allows the energy and utility companies to be more proactive in their approach to problem solving, as opposed to reacting to customer complaints.

“What many people don’t know is that if the U.S. continues with business as usual, by 2030 we will have to build 400 new power plants to keep up with current demand,” said Saifur Rahman, IEEE Fellow. “Efficiency and load reduction need to be introduced to our current power systems so that we can get more with less. The state regulatory commissions need to introduce smart rates to incentivize consumers into taking advantage of smart grid technology.”

In addition, other IEEE members participated in various aspects of Fortune Brainstorm: TECH, including:

- **IEEE Member Susan Hassler**, the editor-in-chief of IEEE *Spectrum* Magazine, who moderated a panel with futurist, author and inventor Ray Kurzweil, in the conference session, “Technology’s Accelerating Power.”
- **IEEE Fellow Charles Elachi**, Director of the Jet Propulsion Laboratory and Vice President of the California Institute of Technology, who discussed the future of space exploration at the session, “Space: Live Long and Prosper.”
- **IEEE Executive Director James Prendergast and Leah Jamieson** both participated in the exclusive FORTUNE InfoTech 40 roundtable. The InfoTech 40 session brought together 40 of the technology industry’s most influential CIOs, CTOs and technology leaders of the digital world for a high-level strategy session.

If you are looking for resources and experts to provide insightful commentary about energy or smart grid issues, please contact IEEE at ieee-PR@ruderfinn.com.

For more information on FORTUNE Brainstorm: TECH, please visit:

http://www.timeinc.net/fortune/conferences/brainstormtech/tech_home.html

About IEEE

IEEE (Institute of Electrical and Electronics Engineers, Inc.), the world’s largest technical professional society, is commemorating its 125th anniversary in 2009 by “Celebrating 125 Years of Engineering the Future” around the globe. Through its more than 375,000 members in 160 countries, IEEE is a leading authority on a wide variety of areas ranging from aerospace systems, computers and telecommunications to biomedical engineering, electric power and consumer electronics. Dedicated to the advancement of technology, IEEE publishes 30 percent of the world’s literature in the electrical and electronics engineering and computer science fields, and has developed nearly 900 active industry standards. The organization annually sponsors more than 850 conferences worldwide. Additional information about IEEE can be found at <http://www.ieee.org>.