



2010 IEEE POWER & ENERGY SOCIETY GENERAL MEETING SETS RECORD ATTENDANCE. 2356 ATTENDEES ARRIVE FROM AROUND THE WORLD

***“Power Systems Engineering in Challenging Times”
is technical program conference theme.***

The IEEE Power & Energy Society held its 2010 General Meeting in Minneapolis, MN., USA, July 25-29 with a theme and platform which offered new insights, innovative ideas and answers to some of the tough questions facing the power and energy industry today.

The meeting provided an international forum for attendees to promote, share, and discuss a myriad of ongoing developments that relate to today’s power and energy industry. During the meeting attendees had the opportunity to participate in a number of high quality technical panel and paper sessions, several tutorials, technical tours, committee meetings, networking opportunities, PES award presentations, social functions and more. The meeting was hosted by Xcel Energy and Great River Energy.

According to Mike Jensen, Local Organizing Committee Chair, “The success of the conference is directly linked to the quality of the technical program and the effort of the many committee volunteers who contributed to the important elements of an exciting and relevant event. The event provided something for seasoned professionals working in the industry and students who are preparing to enter the profession.”

Said Jensen, “The members of the technical committees of the Power & Energy Society, working with our local organizing committee, assembled hundreds of world class speakers and presenters from around the globe who are known to be the experts and leaders in the field of power and energy.”

The conference began with an Opening Session on Monday morning which included a Members' Meeting followed by a Plenary Session. The Plenary Session included four recognized speakers who focused their remarks on energy policy and infrastructure issues.

Ken Rose, PhD from the Institute of Public Utilities at Michigan State University presented a paper titled: *The Big Picture from the Dismal Science*. The paper reviewed electricity supply and demand characteristics, the resources used to generate it and how resource limits (including environmental constraints) may change our working assumptions in the electric supply industry.

Dr. Rose was followed by Jerry Jackson, PhD from Texas A&M University discussed *What Economics Really Tells Us About Our Energy Future*. His presentation examined the question: What will the economic recovery mean for future oil, natural gas and electricity prices and how do issues like resource scarcity, technology development, and carbon taxes impact the familiar energy demand and supply model?

The third speaker, Steve Caldwell from the Pew Center for Global Climate Change emphasized *Electricity Demand in a Low-Carbon Energy Future*. Mr. Caldwell discussed information focusing on the current trends that may significantly affect future electricity demand including reforms to utility regulation, new efficiency standards, and increased and novel methods for educating consumers about their consumption and its impact.

Concluding the Plenary Session, Giuliano Monizza, PhD from T&D Europe, an association of electricity transmission and distribution equipment and services companies examined the three forces *Enabling the Future Sustainable Energy System*. The three forces included: 1. Technology push through R&D funding for key technologies, and funding for full scale demo projects. 2. Market pull through reliable long-term investment incentives, and growth in public acceptance and awareness. 3. Dialogue and cooperation between politics, industry, and NGOs manifested as legislation at the EU and national level.

Technical Meetings

Throughout the week a number of technical meetings were scheduled. Super Sessions explored topics from different perspectives. The five Super Sessions addressed subjects that are of significant interest to the profession. The five Super Sessions included: Solar PV: Challenges in Furthering its Penetration; Smart Grid; Deploying Algorithms in Smart Grids; Integration of Plug-In Hybrid and Electric Vehicles: the International Experience and a fifth and concluding session on DG Integration.

Complementing the Super Session program the Power & Energy Education Committee presented a series of tutorials and PES offered its Plain Talk courses. The tutorials included: Wind Plant Collector Systems Design, Voltage Sourced Converters, Smart Distributions Systems, Transient Analysis of Power Systems: Solution Techniques, Tools, and Applications; Synchronized Phasor Measurements: Fundamentals and

Applications; Power Quality-From Lightning to Harmonics: Problems and Solutions; Breaker Failure, Smart Grid 101-The Basics of Smart Grid and Smart Grid Cybersecurity-Protecting the Smart Grid.

Plain Talk courses included: Power Quality-From Lightning to Harmonics: Problems and Solutions; Operation of Electricity Markets-Technical and Economic Aspects; Power System Basics-Understanding the Electric Utility Operation Inside and Out; Distribution System-Delivering Power to the Customer; The Grid-The Interconnected Electric Bulk Power System; Smart Grid 101-The Basics of Smart Grid and Smart Grid Cybersecurity—Protecting the Smart Grid

Student Support Program

The IEEE PES 2010 GM organizing committee and the PES Power and Energy Education Committee offered several activities for student attendees including a Monday night poster session, reception and student poster contest.

On Wednesday students attended a Student/Industry/Faculty Luncheon and Job Fair. The keynote address at the luncheon was presented by Erich Gunther, the Chairman and Chief Technology officer of EnerNex Corporation. His presentation entitled, ***Power Engineering in a Smart Grid World*** focused on a practicing consulting engineer and employer's perspective on the skills that are needed to practice the art of power systems engineering in the 21st century. Mr. Gunther discussed how his eclectic engineering and technical background accidentally prepared him for the smart grid and how the power and energy industry might try to apply those lessons learned on purpose in the future.

Adding to all of the activity at the meeting the Local Organizing Committee organized several technical tours which are a unique element of the PES General Meeting technical program. This year, attendees registered for two Tuesday tours of the 3M Company or a tour of the Enterprise Data Center —Uptime Institute Tier 3 Certified & Great River Energy or a Wednesday tour of Xcel Energy Merriam Park (SMART) Substation in St. Paul.

***2011 Announcement:** The Power & Energy Society is pleased to announce that its 2011 General Meeting will be held July 24-29 at the Detroit Marriott within the Renaissance Center in Detroit, Michigan. The theme of the meeting is the Electrification of Transportation & the Grid of the Future.*