

# conference reports



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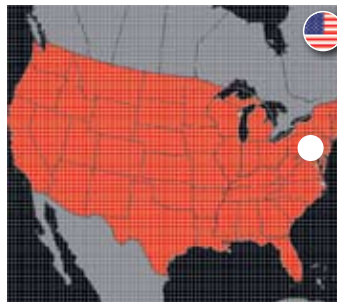
## PAC conferences around the world

Protection, Automation and Control conferences around the world provide forums for discussions and exchanges of ideas that help the participants in resolving the challenges that our industry faces today.

Stan Horowitz received the inaugural Lifetime Achievement Award.



**The IEEE Power & Energy Society's 2008 General Meeting was held in Pittsburgh, PA, USA**



Paper session.

a Student/ Faculty/Industry luncheon and Poster Contest.

David L. Lawrence Convention Center - the GM venue.



## IEEE PES, General Meeting 2008

THE IEEE POWER & ENERGY SOCIETY'S 2008 General Meeting was held in Pittsburgh, PA, USA from 20 to 24 of July, 2008. It was co-hosted by Allegheny Power and Duquesne Light.

The General Meeting is a forum for professionals from the different fields in our industry that allows them to get together and discuss the challenges of today and the ideas for the future. This is spread over a wide range of activities included in the five day program:

- High quality technical sessions
- Tutorials
- Technical tours
- Committee and working group meetings
- PES award presentations

- Technical panel and paper sessions
- Social functions and networking opportunities

All activities are centered on the main theme of the conference - Conversion and Delivery of Electrical Energy in the 21st Century.

The preferential technical topics supporting the theme were organized into a number of tracks:

- **Track 1:** Understanding and Responding to System-Wide Events
- **Track 2:** Utilization of Energy Resources
- **Track 3:** New Technologies
- **Track 4:** Power Reliability, Quality and Safety
- **Track 5:** Improved Measurement and Control Technologies
- **Track 6:** New Market Structures

The conference also included several Super Sessions, designed to explore the selected topics from a number of different perspectives. The topics were:

- Wind Power
- Distributed Generation
- Nuclear Power
- Smart Grid
- Vision 2020

A special student program for IEEE PES student members included

## The General Meeting was co-hosted by Allegheny Power and Duquesne Light.

The Organizing Committee scheduled a number of interesting technical tours allowing the participants to visit a substation, a power quality laboratory, power electronics, fuel cells and other power and energy related technology facilities.

The Welcome Reception was held on the Gateway Clipper Riverboats, allowing the attendees not only to enjoy the beautiful Pittsburgh skyline, but meet new and old friends.

The Super Sessions were some of the key events that challenged the participants to look at new ways of doing things as a result of the trends in our industry. Some of them were more closely related to protection, automation and control.

The Super Session on Distributed Generation focused on distributed resources (DR) and covered sodium-sulfur (NaS) battery energy storage technologies, small-hydro and photovoltaic systems, as well as residential Combined Heat and Power (CHP) technologies.

The Super Session "Vision 2020" included presentations on how different technical fields will impact the electric network development in the year 2020. The contributions covered the following technical fields:

- Digital Communication
- Cyber Security
- Dynamic Network Security
- AC and DC Transmission Systems

Emerging Technologies in Support of Smart Grids was the theme of another Super Session. It attempted to clarify the definition of a "Smart Grid" as the use of



*Pittsburgh offers a mixture of classic and modern architecture.*

advanced technologies to improve the performance of electric utility systems with performance including:

- Efficiency and Utilization
- Power Quality and Reliability
- Utility Bottom Line
- Others.

The above goals can be achieved using distributed data communication, computing and control technologies, efficient transfer of data and control between many distributed field units.

Another major event in the program was the PES Awards Luncheon. Many IEEE Power & Energy Society awards were presented to engineers from different fields and generations. Two of them were from the field of protection, automation and control: Stan Horowitz received the inaugural Lifetime Achievement Award and Karen Miller received the 2007 Walter Fee Outstanding Young Engineer Award.

**The program included the IEEE**

**Fellows Reception and PES**

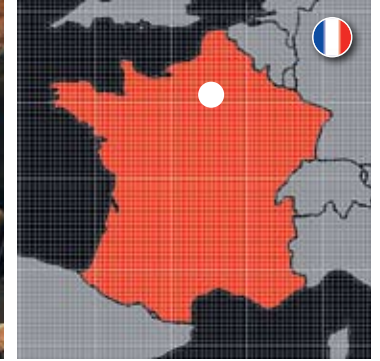
**Awards Luncheon.**

The IEEE Fellows Reception gave an opportunity to the attendees at the conference to meet the IEEE Fellows from the Class 2008. Three of them are distinguished members of the PAC community - Dr. Bogdan Z. Kasztenny, Canada; Vahid Madani and Kenneth Martin, USA.



*Karen Miller received the 2007 Walter Fee Outstanding Young Engineer Award.*

## CIGRE - General Session 2008, Paris, France



**CIGRÉ's General Session provides a unique permanent forum for delegates and exhibitors.**

THE 2008 CIGRE SESSION, as usual, was held in the Palais de Congrès (Congress Palace) in Paris. It was attended by about four thousand specialists from more than eighty countries around the world – evenly representing utilities, manufacturers, consultants, researchers, academics and students. These numbers show the importance of the event,

making it one of the key global events for our industry.

About four hundred papers on tens of preferential subjects submitted from member countries' National Committees were accepted for inclusion in the conference program. Twenty three papers were focused on protection, control and automation subjects. Even that Paris is a place that offers the visitor a lot of entertainment, art and food, the attendees spent the day participating in paper discussion sessions, working group meetings, technical committee meetings or exploring the new technical solutions offered by manufacturers at the exhibition. As part of the 42nd CIGRE Session,

*The UCA International Users Group booth attracted many visitors.*

Study Committee B5 "Protection and Automation" organized an open technical discussion based on two preferential subjects:

- **PS1:** Impact of process-bus (IEC61850-9-2) on protection and substation automation systems
- **PS2:** Life cycle management of protection and control systems

The Special Reporter for PS1 was Christoph Brunner, Switzerland and the Special Reporter for PS2 was Iony Patriota de Siqueira, Brazil.

The six papers submitted for Preferential Subject 1 covered aspects like:

- System architecture considering system reliability
- Benefits of the technology
- Practical experience
- Condition monitoring of primary equipment
- Testing of a process bus based system

More detailed report on the discussion of PS1 is available under Industry Reports of this issue of the magazine, provided by Christoph Brunner.

The seventeen papers covering topics related to Preferential Subject 2 discussed:

- Testing methods for protection



*B5: Protection and Automation Paper Session.*

## The CIGRE 2008 Session was attended by representatives of more than 80 countries.

and control systems

- Impact of IEC 61850 on testing and asset management
- Lifetime management of protection and control systems
- Remote management of protection and control systems
- Exploitation of protection and control systems.

The Protection and Automation session was attended by around 400 experts that participated in active discussions of the papers and the reports.

The questions posed by the special reporters lead to a very lively discussion. Many specialists from around the world delivered, in the two or three minutes allowed, their prepared contributions in response to the questions. Spontaneous contributions were made at the end of the discussions on each of the two preferential subjects.

Summaries of the Special Reports on both preferential subjects were published in this Summer 2008 issue of PAC World.

A major part of the CIGRE Session is the vendors' exhibition. It brings all leading manufacturers of electric power systems transmission technology and gives the attendees of the conference an opportunity to experience directly the latest products available on the market and discuss their applications with the vendors' representatives.

One of the obvious things related to protection, automation and control was the increased number of IEC 61850 compliant



**The Central Office of CIGRE is located in Paris, France.**

devices, as well as a new generation of Intelligent Electronic Devices designed specifically for operation in distributed solutions based on the standard.

Visitors to the exhibition discussed IEC 61850 and its applications not only with experts at the individual manufacturers'

booths, but also attended a seminar on the subject at the UCA International Users Group stand.

The Buffet-Dinner was organized by the French National Committee and CIGRE at the "Pavillons de Bercy."

It gave an opportunity to the participants at the conference to relax and enjoy the festive atmosphere, French food and wine, while making friends with colleagues from other corners of the world. ■

*B5 Preferential Subject 2 paper session.*

**Palais des Congrès de Paris - the venue of the 2008 Session.**





## 2008 WPRC Western Protective Relay Conference

**The 35th Annual Western Protective Relay Conference was held in Spokane, WA**

THE CONFERENCE IS THE LARGEST specialized conference in the field of electric power systems protection in the world. This year it was attended by about six hundred specialists from many countries.

The conference program included fifty four papers covering different aspects of protection:

- Transmission
- Distribution
- Generator
- Wide area

Other topics discussed at the conference were: communications, synchrophasors and security.

Only one paper was presented (as an alternative paper) on IEC 61850.

The papers were presented at the Spokane Convention Center during the three days (21 to 23 October 2008) of the conference mostly in parallel sessions with breaks between the individual papers to allow the attendees to select between the two papers presented in each time slot.

Five panelists discussed with the audience issues related to the security partnership between manufacturers and customers.

After the end of the paper sessions the attendees had the opportunity to visit the hospitality suits at the Red Lion hotel, see the latest technology – devices and tools - in the field offered by the different vendors, and discuss their application. ■

## CEPSI 2008, Macao,

**The 17th Conference on Electric Power Supply Industry (CEPSI 2008) was hosted by Companhia Electricidade de Macau (CEM).**

The 17th Conference of the Electric Power Supply Industry (CEPSI) was held from 27 to 31 of October 2008, at the Venetian Macao-Resort-Hotel.

The Venetian Hotel has the largest casino in the world. At the same time it offers 100,000 square meters of flexible convention and exhibition facilities that made it an excellent venue for the conference panels, paper sessions and exhibition.

The Macau Special Administrative Region (MSAR) is a part of China's territory. It is located on the Southeast coast of China to the western bank of the Pearl River Delta. Bordering on Guangdong Province, it is 60 km from Hong

**CEPSI is the region's largest forum for professionals, equipment manufacturers and service providers from different fields in the electricity power industry.**

Spokane Convention Center - the conference venue



## The 17th Conference of the Electric Power Supply Industry was held in Macao.



The conference venue - the Camino Real hotel



The Macau Special Administrative Region (MSAR) is a part of China's territory.

Kong and 145 km from the city of Guangzhou.

The main theme of the conference was "Power Sector in a Fast Climate Changing World". It highlighted the complex challenges our industry faces – the balancing act of providing energy but at the same time being mindful of our impact on the environment.

Nearly 600 abstracts from 30 countries around the world covering various technical, commercial and management topics were received by the technical committee.

The selected papers were presented at concurrent Technical Sessions - either as oral or poster presentations. Technical Visits were an important part of the

CEPSI Conference & Exhibition and provided a great opportunity for the more than 1200 delegates to visit key utilities and meet people actively involved in a variety of projects.

The participants in the conference were divided in ten groups that visited substations or power plants owned by utilities in Macao, Hong Kong and China.

The conference program included seven panel discussions focusing on some of the key issues for our industry:

- Nuclear power versus renewable energy
- Smart grid
- Efficient & Reliable Power Delivery

The conference program included not only technical events. Various entertainment performances were offered during several social functions. It culminated with the Cultural Night when the participants attended a Cirque du Soleil show – the ZAIA - at the Venetian.

During the conference the winner of the CEPSI 2000 Photography Contest was announced - Xiao Zhiwen for his picture "Colorful earth." ■



Major equipment vendors' exhibited at CEPSI.



Modern architecture can be seen in Macao.