conference reports

WAMS Conference 2008
St. Petersburg, Russia
page 84

Georgia Tech FDA Conference 2008
Atlanta, Georgia, USA
page 85

Protection Conference 2008
Monterey, Mexico
page 86

Georgia Tech Protective Relaying Conference 2008
Atlanta, Georgia, USA
page 86

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.

IX Technical Seminar on Protection & Control 2008
Belo Horizonte, Brasil
page 88

2008 PowerGrid Europe
Milano, Italy
page 89

by Rui Menezes de Moraes , ONS, Brazil

WAMS Conference, St. Petersburg, Russia

The 2nd International Conference on Monitoring Power System Dynamics Performance took place in Russia.

Paper session

Saint Petersburg, one of the liveliest and most cosmopolitan cities in Russia, was the venue of the 2nd International Conference on Monitoring Power System Dynamics Performance.

This beautiful city was founded in the beginning of the XVIII century as the capital of the Russian Empire. It is impressive and famous over the world for its architectural heritage, mixing baroque, neoclassical and Russian influences.

The conference was hosted by the System Operator for UES of Russia, the CIGRE Russian National Committee and the High Voltage Direct Current Power Transmission Research Institute - NIIPT from 28 to 30 April, 2008.

The first edition of this international conference was held in Moscow in 2006 and the conference papers acquainted the participants with the wide area measurement technology application for large power grid operation in different countries.

The purpose of the second conference was to analyze and exchange experience on the latest technical solutions in Wide Area Measurement Systems. The conference included a one day workshop on present tools and techniques for synchronized phasors measurements of the power system presented by Prof. Arun Phadke and Kenneth Martin from the USA.

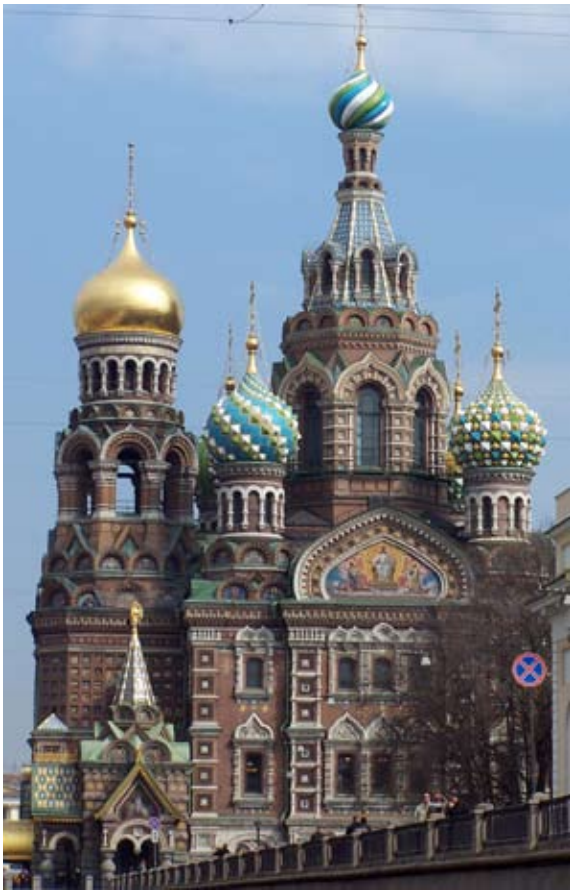
A manufacturer exhibition ran in parallel with the three-day conference and gave the participants a valuable opportunity to get updated with products and technological innovations by the leading manufacturers in the area.

Conference papers present the synchrophasor activities in various countries, including Australia, Croatia, Italy, Bosnia, China, Brazil, Slovenia, US, UK and Russia. Interesting results from dynamic performance of commercial PMU tested by NIIPT were presents and re-enforced the need for interoperability tests to be performed.

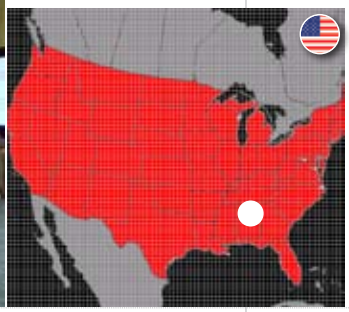
The conference gala dinner was animated by a Saint Petersburg singer presentation, followed by dancing and acrobatic performance, giving a sample of the diverse cultural tradition.

Dynamic performance at the coference gala dinner

St. Petersburg is known for its wonderful Russian Orthodox Cathedrals



Wide Area Monitoring Systems play an important role in improving system security.



VLPGO WG 1 Synchrophasor Applications Meeting

The VLPGO (Very Large Power Grid Operators) is an international association of the greatest Power System Operators, created with the task to debate common subjects, mainly of technical nature. This association bring together System Operators from all over the world, with a minimum of 50,000 MW of installed capacity. VLPGO activities are conducted through thematic working groups, established, each year by the VLPGO Steering Group. In 2008, there are three working groups:

- WG 1 – Synchrophasor Applications
- WG 2 – Cascading Events
- WG 3 – Market.

VLPGO WG 1 first meeting was held in Saint Petersburg during the three days preceding the 2nd WAMS Conference, with the participation of representatives from SO for UES (Russia), PJM Interconnection (US) and ONS (Brazil). Representatives from Fingrid (Finland) also joined WG 1 as observers.

This first meeting of WG 1 aimed to discuss the Work Plan and Budget for 2008 activities. The group agreed to revise the Work Plan to deliver two preliminary reports on WAMS Architecture Requirements and PMU Certification Test Methodology. ■

I would like to thank my colleague Héctor Volskys for the nice Conference and VLPGO Meeting photos.

Georgia Tech FDA Conference

The conference provided an opportunity for industry experts to share their thoughts on the changing technology and its impact on the recording and analysis of system events.

The 11th Annual Georgia Tech Fault and Disturbance Analysis Conference was held 19 – 20 May, 2008 in Atlanta, Georgia, USA. This year there was a change in the conference venue – the historical Fox Theater.

During the two days of the conference authors from several countries presented the twenty two papers selected by the technical committee.

The papers covered a wide range of topics related to electric power systems fault and disturbance analysis:

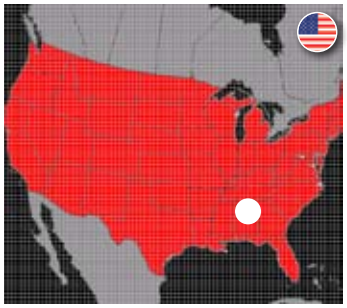
- Analysis of real system events
- Recording and analysis tools
- IEC 61850 and its impact on fault and disturbance analysis
- Wide area monitoring

The attendees had an opportunity to discuss the papers with the presenters, as well as to the hospitality suites after the end of the day's sessions. There they could see the latest developments of new technology in the field exhibited and demonstrated by leading manufacturers. ■

The historical Fox Theater was the venue of the conference

Oppening of the Fault and Disrurbance Analysis Conference

Georgia Tech Protective Relaying Conference, USA



Walt Elmore presents the 2007 Best Paper Award

THE 62ND ANNUAL GEORGIA TECH Protective Relaying Conference was held in Atlanta, Georgia, USA from 21 to 23 May 2008. The Fox Theatre was the conference venue. The move from the Georgia Tech Conference Center was caused by the increased number of participants – more than 350, predominantly from the United States, but also from other countries around the world – as far as South Africa.

Most of the forty papers selected by the conference committee were presented at parallel sessions – at the Egyptian Ballroom and at the Grand Salon of the Fox Theatre.

The papers were of several different types: tutorials, operation analysis and applications.

Some of the topics included in papers were:

- Impact of distributed generation
- IEC 61850 and its applications
- Lessons learned
- Synchrophasor applications
- Relay testing

After the end of the daily paper sessions the participants visited the numerous hospitality suites and discussed with manufacturers' experts the latest developments in protection, automation and control technology.

The conference banquet included two events. Walt Elmore presented the award carrying his name to the authors of the best paper from the 2007 conference – Russ Patterson and George Pitts. The keynote speaker at the conference luncheon was Gerry Cauley, President and CEO of SERC Reliability Corporation. He talked about the impact of mandatory reliability standards on power system protection.

Binh Dam received the Student Paper Award – Leveraging the .NET Framework in Relay Simulation and Relay Virtual Testing. ■

Paper session at the Grand Salon of the Fox Theater

Protection Conference, Monterey, Mexico

The application of Synchrophasors was the topic that was a strong point of discussion among the participants.

THE IX SIMPOSIO IBEROAMERICANO SOBRE PROTECCIÓN DE SISTEMAS ELÉCTRICOS DE POTENCIA, IX SIPSEP (*IX Spanish-American Symposium of Protection of Electric Power Systems*) was held in Monterrey, México from May 20-23, 2008 at the Camino Real Hotel. This is the main Protection Conference in Central and South America, and it is held once every two years in Monterrey. The Doctoral Program of the School of Mechanical and Electrical Engineering at the Universidad Autónoma de Nuevo León (UANL) and the Federal Power Commission of México (CFE) were the organizers of this event. This year there were

There was a technical exhibition at the conference, that offered an opportunity to see the latest developments in protection systems and testing equipment for protection.

by Miguel Gutierrez , OMICRON electronics, USA

The conference was held in Monterey, Mexico

Monterey, Mexico.

170 participants, and 21 papers were presented. Also there was a panel session on "Application of Synchrophasors." Two tutorials were also presented.

- Protection of Transmission Lines
- Protection of Generators

The main objectives of this symposium were:

- To promote the exchange of experience among specialists in power system protection.
- To encourage the analysis of issues dealing with the protection of longitudinal electric power systems.
- To foster the discussion on relaying philosophies as applied by electric utilities from different countries.
- To promote the analysis of modern trends in protective relaying, specially of digital protective relays and systems.
- To encourage the analysis of topics related to the teaching of power system protection to undergraduate and graduate students.

The main topics discussed during the conference were:

- Relaying philosophy for longitudinal power systems.
- Protection of power system elements.
- Control systems and special protection systems.
- Methods for calculation of settings of relaying systems.
- Analysis of protection operation during disturbances.
- Application of the IEC 61850
- Application of Synchrophasors
- Testing of relays and other elements of the protection system.
- Protective relay design.
- Digital protective relays and systems.
- Wide-area network protection systems

The topic that got the interest of most of the participants, was the application of Synchrophasors. ■

Paper session at the conference.

The conference venue - the Camino Real hotel.

Miguel Gutierrez received his Bachelor in electronic and Licenciatura in Power System from the University of Costa Rica in 1985 and 1988. He worked as a field protection engineer at the Costa Rican Institute of Electricity.and taught protection system at the University of Costa Rica. In 1999 he joined OMICRON electronics (USA) as a sales and application engineer, currently for Central and South America with primary responsibilities in sales, training, technical assistance. He is member of the IEEE.

IX Technical Seminar on Protection & Control, Belo Horizonte, Brazil

Oscar Niemeyer's building inspired the seminar's logo

The Technical Seminar on Protection and Control is a forum for professionals to discuss important issues.

The IX Technical Seminar on Protection and Control was held 1 – 5 June 2008 at Belo Horizonte, Brazil. The host city is the third largest in Brazil and the capital of the state of Minas Gerais. It is surrounded by the Serra do Curral Mountains, which serve as a natural backdrop. The convention center is part of the life and history of the city of Belo Horizonte. Minascentro was created to be a meeting place for the arts, culture, industry, commerce, tourism and science.

The Seminar's mission is to be one of the main venues of the national electric sector for debates and the exchange of experiences in matters related to local protection and control of power electric systems, allowing a technical-scientific interchange between energy concessionaries, manufacturers, universities, consulting companies and research entities, through the presentation of technical papers by national and international experts alike.

It is intended for professionals in such areas as design, implementation, studies, operations as well as professionals from other areas working with local protection and control of generation systems, transmission and distribution of electric energy, providers of equipment and services of local protection and control systems.

Professors, researchers, university and research center students, professionals working in governmental and regulatory bodies and in other agencies involved with the subject participated in the seminar.

A special session featuring Distinguished Invited Speakers allowed the attendees to learn from leading world experts about the trends and future of our industry.

The participants in the Seminar presented and discussed many issues of great importance to the protection, automation and control industry, such as:

- Impact of distributed generation
- Evaluation of protection and control systems performance Reliability
- Commissioning, certification and applications of the IEC 61850 Standard
- Disturbance analysis
- Integration of new players: protection, control, and supervision responsibilities and requirements.
- Synchronized phasor measurement applications
- Special Protection Systems
- Protection systems settings, management, commissioning and maintenance
- New principles of protection and control
- Generator protection ■

Estação Square in Belo Horizonte

by Christoph Brunner, Switzerland

2008 PowerGrid Europe, Milan, Italy

The seminar provided an environment for sharing ideas and experience

PowerGrid Europe was held in comjunction with PowerGen and Renewable Energy Europe.

The 2008 PowerGrid Europe conference and exhibition was held in conjunction with PowerGen and Renewable Energy Europe from June 3 to 5 in the Fiera Milano City in Milan, Italy. This Northern Italian "capital" is a welcoming city for visitors from around the world. The city is not only famous for the Duomo and the Opera House La Scala, it has as well a reputation for exclusive shopping. The Fiera Milano City – (a second conference and exhibition center north of Milan) – is one of Europe's earliest and largest convention centers.

It was the second edition of PowerGrid Europe. While PowerGen Europe is already a well established conference, PowerGrid Europe is still in the starting phase. According to the conference organization, 12500 attendees from more than 100 countries visited the event. Most of the exhibition surface from three huge halls was used by PowerGen. PowerGrid filled approximately one third of a hall. While all of the leading manufacturers of our industry were present, only a few of them presented equipment and services for the transmission and distribution industry. Most of them were focused on power generation. Hopefully, this will change for the future so that the event will really establish itself as the one event for our industry in Europe.

The PowerGrid Europe conference sessions focused on the evolution, vision and development required for tomorrow's smart grid, and the technology improvements available for the efficient operation of today's grid.

Track 1 "*Active networks and reflecting the smart grid vision*" included the sessions:

- Power market
- Network applications
- Operation and grid codes
- Communications

The session on Operation and grid codes included a review of a blackout in Rhodes. The session Communication and information management provided some interesting papers about IEC 61850, CIM and NERC security requirements.

Track 2, "*System performance*" included the sessions

- Asset optimization
- Measurements
- People as assets
- Improving equipment performance

The measurements session included interesting papers on non-conventional instrument transformers and IEC 61850-9-2. The panel "*People as assets*" focused on the experience and expertise of the employees. Experts talked about the best ways to leverage, train and reward your human assets. ■

Duomo di Milano

Milam is a city with rich cultural traditions