

# conference reports

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**APAP, 2009,  
3rd International Conference on  
Advanced Power System  
Automation and Protection**

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**2nd CIGREM  
Scientific & Technical  
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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.

**VII SIMPASE  
Electrical System  
Automation Symposium**

*Rio de Janeiro,  
Brazil  
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# Actual Trends in Development of Power System Protection & Automation

The 2nd CIGREM was held in Moscow, Russia, on September 7 - 10, 2009

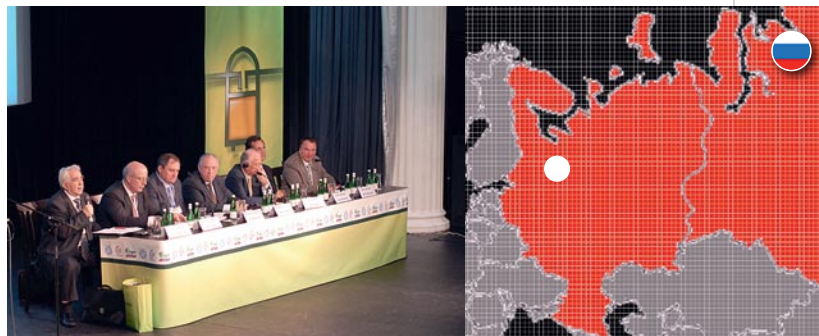
THE SYSTEM OPERATOR OF THE RUSSIAN UNIFIED POWER SYSTEM (SO UPS), Russian National Committee (RNC) of CIGRE and All-Russian Scientific Research & Development Technological Institute of Relay Engineering (VNIR) organized an international forum on relay protection and substation automation, which was held on September 7-10, 2009 in Moscow (Russia).

The 2nd International Scientific and Technical Conference "Actual Trends in Development of Power System Protection and Automation" has gathered leading protection and automation scientists and specialists from Russia and the international community. The conference continued the best traditions of the first symposium held in 2007 in Cheboksary (Russia).

Over 270 participants discussed 72 reports organized in the following topics:

- Complex evaluation and methods used for dependability and technical excellence improvement of relay protection systems
- Power system simulation methods and their influence on development of relay protection and automation
- Instrumental and functional integration of different elements

Attendees  
at a paper  
session.



Pictures: courtesy of the organizing committee.

## 2nd Scientific & Technical Conference, 2009

**CIGREM was organized by SO**

**UPS, RNC of CIGRE and VNIR.**

used for power system control. Integration of control systems applied to different power system elements

■ Standard IEC 61850 and its influence on development of relay protection and substation automation

■ Latest trends and developments in power systems control during its normal and emergent operating conditions

■ Recording of analog and digital signals during abnormal operation

of power systems and their expert analysis. Expert systems for evaluation of power system disturbances

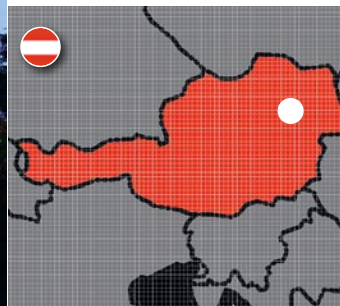
The conference has offered time to all members of the protection and automation community: various levels of the utility, engineering companies, vendors, as well as scientific organizations. The security of the power supply, as the highest priority factor of the UPS Russia (*United Power System of Russia*) development determined the discussions.

It was important that the conference started an open discussion of the new informational theory of relay protection. The

The PACWorld  
Guru Sergei  
Petrov attended  
the conference.



## Vienna, Austria



## IPTS - International Protection Testing Symposium, 2009

The keynote speaker for the symposium was Dr. Alexander Apostolov, Editor-in-Chief of the PAC World magazine, who spoke about "Signals of the Future" – the challenges for testing multifunctional intelligent electronic devices and distributed protection and control systems in an environment characterized by the shifting from the analog signals of conventional systems to the communications messages of IEC 61850 based solutions.

Participants from Europe, Asia, Africa, America and Australia presented thirty papers describing their experience and discussing requirements, methods and tools for testing.

The papers covered a wide range of issues that can be grouped in several main categories:

- Application of IEC 61850 in substations and between substations and its impact on the requirements, methods and tools for testing

- Automatic testing and other methods for improving the efficiency of testing

- Testing of distance, differential and other protection functions and schemes

*Networking during the conference dinner.*

**The symposium was held at the Borsensale in Vienna on 13 and 14 October 2009.**

- Testing under dynamic and power swing system conditions
- Testing of power quality monitoring devices
- Protection refurbishment and maintenance and their impact on testing

Each paper presentation was followed by discussions that

allowed the presenters to clarify some issues covered in the paper and the participants to express their opinion or share their experience on the subject.

The symposium dinner was held at the Technical Museum of Vienna. It gave the participants the opportunity to explore the "Energy" exhibition and have in a relaxed atmosphere friendly discussion about technical and other issues.

At the end of the second day of the symposium, the attendees enjoyed folklore music at the charming Viennese Heurigen Parlor. ■

*The conference venue.*



# APAP Conference 18 – 21 October 2009, Jeju, South Korea



**This conference focuses on establishing global cooperation channels among researchers and engineers.**

THE THIRD INTERNATIONAL CONFERENCE ON Advanced Power System Automation and Protection (APAP 2009) was held from 18 to 21 October 2009 at the Lotte Hotel Jeju, Seogwipo, Jeju, Korea. The conference was organized by Next-generation Power Technology Center (NPTC) Korea Electrical Manufacturers Association (KOEMA).

The main goal of APAP 2009 is to establish global cooperation channels among researchers and engineers in the power system protection and automation field to share their experiences and knowledge.

An increased number of participants attended this third APAP, thanks to the fact that the conference was organized as a joint event with the CIGRE study Committee B5 Colloquium 2009. The conference program reflected the much higher recognition of the importance of protection and automation technology due to recently emerging Smart Grid issues. APAP 2009 responded to this trend by a specially prepared panel session for Smart Grid.

APAP 2009 provided the new style session-Industry Special Session firstly introduced in APAP2007 which is dedicated to industry experts who used to feel uncomfortable about the academic conference.

The multiple papers were presented in several different types of sessions. The Intensive Oral Session gave the speakers 15 minutes for presentation. After all the speakers of this session

*Paper session at the conference.*

finished their presentations, 40 minutes were provided for the session chairman to summarize the presented papers and to lead an intensive discussion on the topics of the session including questions and answers for the presented papers.

The Oral Sessions gave the speakers 15 minutes for presentation followed by 5 minutes for questions. A large number of papers were presented in Poster Sessions, when the authors stood near their poster during the duration of the session in order to discuss in detail their paper with the interested participants

An Industry Special Session allowed presenters to share their field experiences and new ideas in short presentations.

Companies exhibited their power system automation and protection related products in the halls where during the coffee breaks the participants had the opportunity to discuss the exhibited products and their applications.

After the end of the official part - the technical program of the conferences, some of the participants enjoyed the extraordinary beauty of Jeju Island during a half-day tour. ■

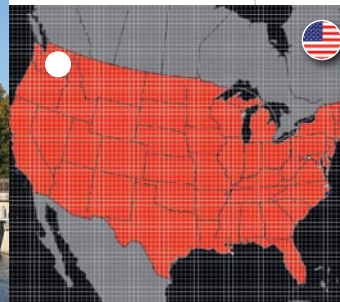


*Lotte hotel - the conference venue.*



*The conference banquet included performances of traditional Korean music and dance.*

## WPRC was held in Spokane, USA 20 - 22 October, 2009



THE WESTERN PROTECTIVE RELAY CONFERENCE (WPRC) is an annual event held in the second half of each year in Spokane, Washington, USA. This is probably the largest specialized conference in the field of electric power systems protection in the world. It is an educational forum organized by Washington State University for the presentation and detailed technical discussion of broad range of different aspects of protective relaying and related subjects.

The three days conference was held at the Spokane Convention Center from 20 to 22 October 2009.

Most of the attendees are from the western United States, but there were also participants from many countries from all over the world. This forum allows participants to learn about the latest protection and control technologies and how to apply these advanced technologies in order to prevent electrical power failures. Speakers from many different countries presented papers

**WPRC is one of the largest specialized conferences in the field of electric power systems protection in the world.**

selected by the conference technical committee.

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

- Transmission
- Distribution
- Generator and motor
- Wide area
- Synchrophasor applications
- Communications

Considering the increasing interest in IEC 61850 for substation communications around the world, an interesting observation is the

very limited number of papers (one) selected by the technical committee for presentation on this subject during the conference.

The papers were presented 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.

After the end of each day sessions, the attendees had the opportunity to visit the vendor suites at the Red Lion Hotel at the Park. There they discussed in a relaxed atmosphere the latest devices and tools in our field offered by the different vendors. ■

*The conference venue.  
-the Convention Center.*



*The WPRC gave an opportunity to the attendees to discuss PAC issues.*

