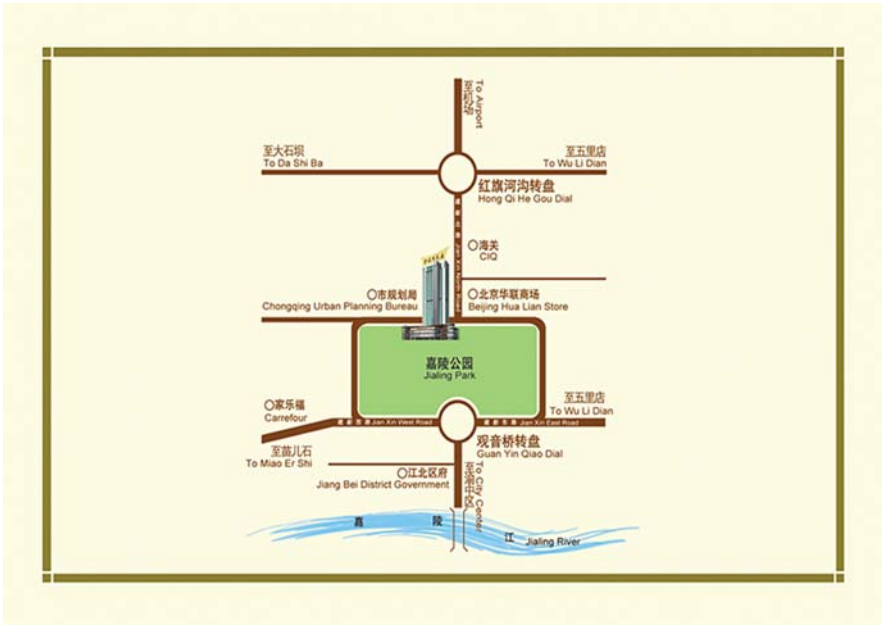

CONTENTS

1. INVITATION

On behalf of the Chinese Society for Electrical Engineering (CSEE) and as Chairperson of the Organizing Committee, it is truly the greatest honor and pleasure for me to extend a hearty welcome to you all to the 2006 International Conference on Power System Technology to be held from October 22-26, 2006 in Chongqing, China.

This biennial conference is the fifth in this title since its inaugural in 1998, in Beijing, China. It provides an ideal forum as usual, for power engineering professionals and academic researchers to exchange up-to-date knowledge, share experience and views on key areas, new developments and possible applications of electric power engineering and power system technology. The conference received around 1400 abstracts, and over 590 were accepted after a careful review, about 330 authors choose to orally present their papers. Authors are coming from 29 countries and regions all around the world.

With the theme of "Opportunities and Challenges under Rapid Power Growth", the POWERCON2006 aims to address key issues on power system technology, specially from the Asia Pacific region, in line with today's expanding, diversifying and transfiguring power systems. It will focus not only on traditional power system issues but also new challenges emerging from distributed generation, industrial restructure and wide area interconnections. Currently in China, building UHV backbone network, improving power transmission capability of existing power grids, finding solutions to ever-increasing energy demand and the potential energy crisis, are priorities for power industry development. It is very gratifying for us to be assembled here, to listen to the keynote speeches, to participate in more than 40 sessions on the development of UHV transmission technology, the experience in the construction and operation of large power transmission grid and renewable energy development, attending such a specialized conference, I am convinced that many of the problems can be addressed, new ideas be inspired, and momentum be gained for future research.

POWERCON2006 is co-sponsored by IEEE Power Engineering Society and the Chinese Society for Electrical Engineering, and Organized by China Electric Power Research Institute in cooperation with Chongqing Electric Power Corporation and Chongqing Society for Electrical Engineering. I hereof would like to express my gratitude to the sponsors, co-sponsors, and coordinators, who helped the preparation work of this confernece. My special thanks must go to each of the participants and attendees here, for the interest and efforts in helping this conference possible, especially many of whom have traveled great distances and taken valuable time from their very busy schedules to attend the conference.

Chongqing, literally known as "double celebration and happiness", is an ideal location for the conference. I earnestly hope that your visit in this golden autumn season of Chongqing, will prove double pleasant and rewarding than you expected. Finally, I wish POWERCON2006 a complete success.

Ruomei Li
Chairperson of Organizing Committee
IEEE/PES T&D Asia Pacific 2005,
Deputy Secretary General
Chinese Society for Electrical Engineering

2. ORGANIZATION

Conference Chairman McDonald, John D. (USA)
Co-chairman Lu, Yanchang (China)

International Steering Committee
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Vice Chairman Dent, Robert A.(USA)
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Paserba, John	(USA)	Zhang, Guixing	(China)
Puttgen, Hans B.	(USA)	Zheng, Jianchao	(China)
Shu, Yinbiao	(China)		

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Goel, Lalit	(Singapore)	Taylor, Carson	(USA)
Gu, Guobiao	(China)	Toshiyuki Hayashi	(Japan)
Han Yingduo	(China)	Toyoda, Junichi	(Japan)
Han Zhenxiang	(China)	Voropai, N.I.	(Russia)
Huang Qili	(China)	Wang, Xifan	(China)
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Li, Wenyuan	(Canada)	Wu, Q.H.	(UK)
Liu, Chen-Ching	(USA)	Xu, Wilsun	(Canada)
Lo, K L	(UK)	Xue, Yusheng	(China)
Lu, Qiang	(China)	Yan Luguang	(China)
Mariun, Norman	(Malaysia)	Yang, Qixun	(China)
Mohmoud Fotuhi	(Iran)	Yu, Yixin	(China)
Mukhopadhyay, Subrata	(India)	Zhao, Zunlian	(China)
Pan Yuan	(China)	Zhu, Yinghao	(China)
Pan, C.T.	(Taiwang, China)		

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Vice Chairman Mukhopadhyay, Subrata (India)
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Cao, Huibin	(China)	Liu, Zehong	(China)
Cao, Yijia	(China)	Liu, Zhaoxu	(China)
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Chen, Weijiang	(China)	Ni, Yixin	(Hong Kong, China)
Cheng, Haozhong	(China)	Shen, Jiang	(China)
Cheng, Shijie	(China)	Sun, Yuanzhang	(China)
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Chung, T.S.	(Hong Kong, China)	Tang, Yong	(China)
Cui, Zhiqiang	(China)	Wang, Chengshan	(China)
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Duan, Xianzhong	(China)	Wang, Hongjun	(China)
Fan, Jiyuan	(China)	Wang, Xuegong	(Canada)
Fang, Yongjie	(China)	Wong,Alan	(Australia)
Guan, Xiaohong	(China)	Wu, Shouyuan	(China)
Guo, Jianbo	(China)	Xiao, Liye	(China)
Guo, Tzong-Yih	(Taiwan, China)	Xiao, Xiangning	(China)
He, Jinliang	(China)	Xin, Yaozhong	(China)
He, Renmu	(China)	Xu, Xiaokang	(USA)
Hsu, James	(USA)	Yin, Yonghua	(China)
Hu, Xuehao	(China)	Zhang, Boming	(China)
Ju, Ping	(China)	Zhang, Lizi	(China)
Kowal, Jean	(France)	Zhang, Wenliang	(China)
Lai, L.L.	(UK)	Zhang, Yao	(China)
Lei, Xiaomeng	(China)	Zobaa, Ahmed F.	(Egypt)
Li, Heming	(China)		

Organizing Committee

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Vice Chairpersons	Xie, Yifan	(China)
	Liu, Zhuangzhi	(China)
	Chen, Ziyun	(China)
Members	Zhou, Ying	(China)
	Ye, Jin	(China)
	Zhao, Jianjun	(China)
	Chou, Wenyong	(China)
	Tong, Jie	(China)

Co-sponsored by: IEEE Power Engineering Society (IEEE/PES)
Chinese Society for Electrical Engineering (CSEE)
Organized by: China Electric Power Research Institute (CEPRI)
Co-organized by: Chongqing Electric Power Corporation
Chongqing Society for Electrical Engineering

3. OPENING CEREMONY SPEAKERS

John D. McDonald

Chairman of POWERCON2006; Vice President of Automation for Power System Automation, KEMA, Inc.; President, IEEE Power Engineering Society

John D. McDonald, P.E., Vice President of Automation for Power System Automation, KEMA, Inc., is currently assisting electric utilities in substation automation, SCADA/DMS/EMS systems, and communication protocols.

Mr. McDonald received his B.S.E.E. and M.S.E.E. degrees from Purdue University, and an M.B.A. degree from the University of California-Berkeley. He is a member of Eta Kappa Nu (Electrical Engineering Honorary) and Tau Beta Pi (Engineering Honorary), is a Fellow of IEEE, and was awarded the IEEE Millennium Medal in 2000, the IEEE PES Excellence in Power Distribution Engineering Award in 2002, and the IEEE PES Substations Committee Distinguished Service Award in 2003.

He is President of the IEEE PES, is Co-vice Chair of IEEE Standards Coordinating Committee (SCC) 36, is a Member of IEC Technical Committee (TC) 57 Working Groups (WGs) 3 and 10, is the Past Chair of the IEEE PES Substations Committee, and is a registered Professional Engineer (Electrical) in California, Pennsylvania and Georgia.

Mr. McDonald teaches a SCADA/EMS course at the Georgia Institute of Technology, a SCADA/Substation Automation course at Iowa State University, and substation automation and distribution SCADA courses for various IEEE PES local chapters as an IEEE PES Distinguished Lecturer.

He is co-author of the book Automating a Distribution Cooperative, from A to Z, published by the National Rural Electric Cooperative Association Cooperative Research Network (CRN) in 1999. He was Editor of the Substations Chapter, and a co-author, for the book The Electric Power Engineering Handbook, co-sponsored by the IEEE PES and published by the CRC Press in 2000. He is Editor-in-Chief, and Substation Integration and Automation Chapter author, for the book Electric Power Substations Engineering, published by Taylor & Francis/CRC Press in 2003.

Yanchang Lu

Chairman of POWERCON2006, Vise-Chairman of CAST, President of CSEE, China

Lu Yanchang, graduated in 1964 from Thermal Engineering Department of Tsinghua University, Beijing. Since 1980, he has served successively as the Chief Engineer of Beijing Thermal Power Plant, Chief Engineer of Ministry of Water Resources & Electric Power，Chief Engineer of Ministry of Energy, Vice-Minister of Ministry of Electric Power and Vice-President of the State Power Corporation of China.

Lu Yanchang is a member of the 10th National Committee of the Chinese People's Political Consultative Conference (CPPCC). He is currently Vice-Chairman of China Association for Science & Technology (CAST), President of Chinese Society for Electrical Engineering (CSEE), and Senior Advisor of the State Grid Corporation of China (SGCC).

4. KEYNOTE SPEAKERS

Zehong Liu

Vice Director General, State Grid Corporation of China

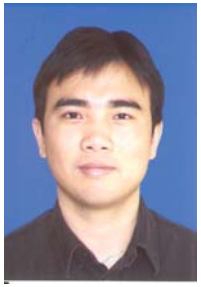
Liu Zehong was appointed Vice Director General of the newly formed UHV Construction Department of SGCC of China in August, 2005. This Department is responsible for research and design of UHV system and projects, purchase and quality assurance of UHV apparatus, site construction and commissioning of UHV projects invested by SGCC of China.

Prior to involving in UHV projects, Mr. Liu was Division Director of the construction department of SGCC. He was deeply involved in planning, research, design, construction, commissioning and operation of HVDC projects.

Mr. Liu has also worked as a research engineer in CEPRI, where he worked on stability and electromagnetic simulation of systems, especially HVDC systems, concept design of HVDC projects, development of softwares.

Xiaochen Wu

Deputy Chief, China Southern Power Grid



Wu Xiaochen joined Technology Research Center (TRC), China Southern Power Grid Co., Ltd (CSG), in 2004 as deputy chief of power system division. TRC is a functional department of CSG that is in charge of the research and development of grid and its relative technologies, coordinating and guiding the resource integration and optimization of grid technology research inside CSG.

Prior to joining TRC, Mr. Wu was the deputy division chief with dispatching center, CSG, where he led a team responsible for power system operation plan.

Mr. Wu also has served as division chief for dispatching center of SPG, which became part of CSG in 2002. During his six-year period with SPG, he was responsible for construction and maintenance of the largest-scaled power grid stability control system around the world, in southern china.

Mr. Wu began his career in SPG in the year of 1996.

Yves Filion

President of CIGRE, President of Hydro-Québec TransEnergie

Yves Filion holds a degree in applied science from the Universitéde Sherbrooke and has completed several management courses, including a program at the International Centre for Research and Studies in Management. Mr. Filion joined Hydro-Québec in 1972, and held various positions in the fields of hydroelectric and nuclear generation before being seconded to Hydro-Québec International in 1982 as Head of Planning and Construction Consultant. He returned to Hydro-Québec in 1983, and in 1988 was appointed Vice President – Generating Facilities and Buildings. Subsequently, he held positions of Interim Executive Vice President -Installations; Executive Vice President-Generation, Transmission and Telecommunications; and Executive Vice President-Distribution and Marketing.

In November 1996, he was appointed Deputy Chief Executive Officer and Chief Financial Officer. In May 1998, Mr. Filion's responsibilities as Deputy Chief Executive Officer were realigned to include distribution, information technologies and customer services. In November 1999, he assumed additional responsibility for industrial development and large-power sales. From November 1999 to August 2000, he also managed Hydro-Québec's transmission division, TransEnergie. In June 2001, Hydro-Québec abolished the position of Deputy Chief Executive Officer and designated Mr. Filion to be President of a new division, Hydro-Québec Distribution. In July 2003, he relinquished his duties as President of Hydro-Québec Distribution and became President of Hydro-Québec TransEnergie.

Mr. Filion is President of the International Council on Large Electric Systems (CIGRE), an international organization with over 5,000 members from more than 76 countries.

Bjarne R. Andersen

President, Andersen Power Electronic Solutions Ltd.

In August 2003 Dr Bjarne R. Andersen started his own independent consultancy company, Andersen Power Electronic Solutions Ltd. His company focuses on the HVDC, SVC and FACTS systems and provides assistance to existing and prospective owners of such systems at all stages of their life cycle, from initial feasibility studies, planning studies, specification, procurement, trouble shooting, system expansion and eventual disposal. Dr Andersen usually works on his own but if a project requires additional skills or manpower he is happy to work with other consulting companies. Andersen Power Electronic Solutions Ltd always provides an efficient, timely and high quality solution.

Prior to starting his own company, Dr Andersen was the Director of Technology for ALSTOM T&D Power Electronic Systems Ltd. The company was one of the main suppliers of HVDC and SVC systems. He had spent 26 years with this company and its predecessor, having joined GEC in 1977 as a Development Engineer, the Company name later becoming GEC Alsthom, before finally becoming ALSTOM. In the early years, Dr Andersen worked on AC and DC harmonic filters, insulation co-ordination and system design for HVDC schemes. Later on, he became responsible for all technical aspects associated with HVDC and FACTS schemes and the development of thyristor valves, controls, and other systems for such schemes.

Throughout his career, Dr Andersen has been active within CIGRE, IEEE and the IET. He was the UK Regular Member for Study Committee B4 (HVDC and Power Electronics) from 2000 to 2006. He was the convenor of CIGRE WG B4-37, VSC Transmission, which has now completed its work, and is currently the convenor of WG B4-39, Integration of Large Scale Wind Power using HVDC and Power Electronics. He received the CIGRE Technical Achievement Award in 2004. He is a Fellow of the IET (formerly the IEE), and was the chairman of the AC/DC conference held in London in November 2001. He is a senior member of the IEEE, and has participated in the work of several working groups within the fields of HVDC, FACTS and the application of Voltage Sourced Converters in AC networks.

5. GENERAL INFORMATION

5.1 Date & Venue

Date: Oct 22 (Sun.) – Oct 26 (Thu.), 2006
Venue: 3rd Floor, Golden Resources Hotel, Chongqing, China
Address: 1, 2nd Branch Jianxin North Road, Jiangbei District, Chongqing, China
Tel: 86 23 67958888 Fax: 86 23 67959999
Web site: http: //www.grhotel.cn/
(In Chinese: 重庆金源大饭店三层，中国重庆市江北区建新北路二支路 1 号（嘉陵公园旁），邮编(P C): 400020)

5.2 Agenda

Oct 22-26, Chongqing, China

	MORNING	AFTERNOON	EVENING
SUN, OCT 22		Registration	Reception
MON, OCT 23	Opening Ceremony & Keynote Speeches	Parallel Sessions	
TUE, OCT 24	Parallel Sessions	Parallel Sessions	Banquet
WED, OCT 25	Parallel Sessions	Parallel Sessions Technical Visit A	Night View Tour by Cruise
THUR, OCT 26	Technical Visit B		

The detail as shown below:

SUN, OCT 22
13:30-18:00 Registration
18:30-20:00 Reception

MON, OCT 23
09:00-10:30 Opening Ceremony &Keynote Speeches
10:30-11:00 Coffee Break
11:00-12:30 Keynote Speeches
12:30-14:00 Lunch
14:00-15:30 Parallel Sessions
15:30-16:00 Coffee Break
16:00-17:30 Parallel Sessions

TUE, OCT 24
09:00-10:00 Parallel Sessions
10:00-10:30 Coffee Break
10:30-12:30 Parallel Sessions
12:00-13:30 Lunch
14:00-15:30 Parallel Sessions
15:30-16:00 Coffee Break
16:00-17:30 Parallel Sessions
18:00-20:30 Banquet

WED, OCT 25
09:00-10:00 Parallel Sessions

10:00-10:30 Coffee Break
10:30-12:30 Parallel Sessions
12:00-13:30 Lunch
14:00-15:30 Parallel Sessions
15:30-16:00 Coffee Break
16:00-17:30 Parallel Sessions
(14:00-17:00 Technical Visit A –to Shiping Substation)
18:20-22:00 Night View Tour by Cruise

THUR, OCT 26

08:30-17:00 Technical Visit B to Dazu Stone Carvings

5.3 An Overview

Around 500 attendees join the conference with about 580 papers accepted for presentation. The conference organizes 42 technical sessions, a session for keynote speeches and four panel sessions. Parallel session is about 3- hour long every half day. Coffee or tea will be served for attendees during half an hour coffee-break. Eight to nine sessions will run simultaneously apart from the panel and poster sessions. Each session is headed by one chairperson. Each presenter is allocated a total of 15 minutes for presentation and 5 minutes for questions and discussion, which will be controlled by the session chairperson.

5.4 Conference Language

Official Language

The official language of POWERCON2006 is English. All documents are associated with POWERCON2006 should be in English.

Simultaneous Interpretation

Only the plenary session of Opening Ceremony and Keynote Speeches in the morning of Oct 23, Banquet Hall 2, are progressed with simultaneous interpreting between English and Chinese. On presentation of the name badge, attendees are allowed to receive the translators from the registration desk for listening to the interpretation. But do not forget to return them right after the conference.

5.5 Name Badge

All attendees for POWERCON2006 are requested to wear name badges in order to join the technical sessions and social programs. Please wear your name badges at all times during the conference period.

5.6 Instructions for Registration

Registration formalities

1. Complete the on-line registration form on the website and obtain registration ID.
2. Make appropriate payment by remarking registration ID.
3. On-site register by informing of registration ID at the on-site registration desk.

Registration Desk

Registration Desk will be open during the following hours:

DATE	TIME	SITE
SUN, OCT 22	13:30 ~ 18:00	Lobby, 1F, Golden Resources Hotel
MON, OCT 23	08:30 ~ 18:00	3F, Golden Resources Hotel
TUE, OCT 24	08:30 ~ 18:00	3F, Golden Resources Hotel
WED, OCT 25	08:30 ~ 18:00	3F, Golden Resources Hotel

Advance Registration

Regular participants who register before Aug 15 are eligible for a reduced rate of registration fee.

Registration Fee

CATEGORY	*Before **Aug. 15, 2006**	*After **Aug. 15, 2006**
IEEE members	US$400 RMB￥3200	US$450 RMB￥3600
Non-IEEE members	US$450 RMB￥3600	US$500 RMB￥4000
Students*	US$300 RMB￥2400	US$350 RMB￥2800
Accompanying persons	US$200 RMB￥1600	US$220 RMB￥1760

Note: 1.Registration from paper authors are only honored till full payment is received before Aug 15, 2006.

2. On-line registration for non-author attendees closes on Oct 15, 2006. After this date, please go to register at the on-site registration desk.

3. Students are required to provide the valid proof of student status.

Additional Fee

Please note that each regular registration allows a maximum of two accepted papers to be presented by “regular fee” paying authors, and the second paper will be charged an additional fee of US$60 / RMB￥500. A “student fee” paying author is allowed to present only one paper.

Payment

Four kinds of payment options:

A Bank draft payable to:
China Electric Power Research Institute
Qinghe, Beijing 100085, China

B Telegraphic Transfer (T/T) payable to:
Name of Beneficiary: China Electric Power Research Institute
Banker Name: Bank of China, Beijing Branch
Banker Address: No.8 Yabaolu, Beijing, China
Swift Code: BKCHCNBJ110
Account No.: 800614585608091014

C Payment by Credit Card
Credit card acceptable: Visa & Mastercard
Service charge: 4% of the sum
Service Company: Chinabank Payment (Beijing)
Fill in the Credit Card Payment Form downloaded from the conference website with card details. Fax the completed form to 86-10-62916913 or email to 2006@conference-power.com or powercon2006@epri.ac.cn.

D Payment by Cash for On-site Registration
If it is not convenient for you (non-author attendee) to pay by three options above, you can choose to pay by cash on-site. Only US Dollars and Chinese Currencies (RMB) are acceptable for the on-site registration at the registration desk. Please kindly prepare cash in advance in case your payment option is by cash.

On-site Registration
On-site registration is available at the registration desk from 13:30, Oct 22 to 18:00, Oct 25. Overseas delegates should receive their receipts for the registration fee from there.

Cancellation and Refund
All cancellations or refund requests must be notified in writing via fax or mail to the POWERCON2006 Secretariat. Cancellations received by Sept 22 will be refunded minus US$50 for service charge. NO REFUNDS will be possibly applied after Sept 22. All refund will be handled after the conference.

5.7 Conference Materials and Activities

The conference materials should be received from the on-site registration desk.

Regular delegates and students: Welcome Reception, Banquet, lunches, Night View Tour by Cruise, admission to the plenary session, all technical sessions and tea/coffee breaks; one copy of Program Manual, one copy of the conference proceedings on CD, one copy of Paper Abstract, one conference bag, lunch coupons and invitation cards, one souvenir of Powercon2006.

Accompanying persons: Welcome Reception, Banquet, Night View Tour by Cruise, the opportunity to register local sightseeing tours open to companions only at the companion rate.

5.8 Visa

A valid passport and an entry VISA to China are required. Please fill your passport number and VISA application information in the on-line registration form. The Secretariat will send the official invitation letters to applicants for Visa application by fax or mail. Please use the invitation letter to apply an entry VISA at the Chinese Embassy or Consulate General in your country.

5.9 Travel Inquiry Desk

Travel information desk, near to the registration desk, will be open by GREAT THREE GORGES INTERNATIONAL TRAVEL SERVICE throughout the conference period. It handles the inquiries about hotel booking, reservation for technical tours, local tours and post-conference tours, information on Chongqing City. Please contact the clerk at the Travel Information Desk.

5.10 Secretariat Office

Open Time

DATE	TIME	SITE
OCT 22, SUN	13:30 ~ 17:00	No.2 Conference Hall, 3F, Golden Resources Hotel
OCT 23, MON	08:30 ~ 17:00	No.2 Conference Hall, 3F, Golden Resources Hotel
OCT 24, TUE	08:30 ~ 17:00	No.2 Conference Hall, 3F, Golden Resources Hotel
OCT 25, WED	08:30 ~ 17:00	No.2 Conference Hall, 3F, Golden Resources Hotel

Services

It offers services such as information query about conference program, computers with internet capability (free of charge), the sale for the conference publications including the abstract book, the CD of the Conference Proceedings and souvenirs.

5.11 Conference Lunches

The Organization Committee of POWERCON2006 invites all participants to lunches during the time of Oct 23-25, to expand the exchanges and friendship. The lunch sites are arranged both at the Golden Resources Cafeteria, - 1st floor (underground), and the Golden Century Chinese Restaurant, 2nd floor, Golden Resources Hotel. Please go for lunch with lunch coupons.

5.12 Coffee Break

Coffee and tea are served for the POWERCON2006 participants and attendees from Oct 23-25 during the coffee breaks located simultaneously in the Banquet Hall No.4 (near to the gate of No.1 Conference Hall), at the gate of No.3 Conference Hall and No.8 Conference Hall, 3rd floor, Chongqing Golden Resources Hotel.

5.13 Computer Service

Computer service with internet capability is available and free of charge in the Secretariat Office, located in No. 1 Conference Hall, 3F, Golden Resources Hotel. Delegates can check the files for preparing presentation and search online for information there.

5.14 Photocopy, Fax & Telephone (charged)

Business services are offered by the Business Center, located in the west side of the lobby, Chonqqing Golden Resources Hotel, including laptop rental, photocopy, fax service, printing, internet connecting, telephone service, express delivery, scanning, goods related with office and business for sale, etc.

5.15 Currency Exchange

Only Chinese RMB is accepted at regular stores and restaurants. Foreign currency and credit card can be used in Chonqing Golden Resources Hotel, where Front Desk in the lobby offers currency exchange service throughout the week, open from 7:00AM to 1:00AM next day. Currency exchange is also available at Chongqing Jiangbei International Airport. The exchange rate is approximately but may not be exactly RMB 8/US$ 1, due to exchange rate

fluctuation. There is no restriction on the import of foreign currency into China. You may exchange RMB back to foreign currency when you leave China.

6. SOCIAL PROGRAM

6.1 Welcome Reception

OCT 22 (SUN), 18:30 ~ 20:00
Banquet Hall, 3nd Floor, Golden Resources Hotel

All delegates and registered companions are cordially invited to the POWERCON2006 welcome reception. Buffet supper with dishes of various tastes will be served to welcome the delegates and help refresh them after a long trip. Please bring the reception coupon.

6.2 Conference Banquet

OCT 24 (TUE) 18:00 ~ 20:30
Banquet Hall, 3rd Floor, Golden Resources Hotel
Sponsor: Chongqing Electric Power Corporation

The invitation is delivered to all delegates and registered companions at the registration desk on arrival. Please make sure to bring the banquet coupon. In the banquet, wonderful performances including different forms of Chinese folk art, acrobatics show, dances and folk music with the typical characteristics of Bayu culture, will be put on show.

6.3 Technical Visit and Sightseeing

Technical Visit
TA: Oct.25(WED) 14:00 ~ 17:00 *Cost: 5US$ per person*
TB: Oct 26(THUR) 08:30 ~ 17:00 *Cost: 40US$ per person (lunch included)*
Assembly & Return Site: Lobby Hall, Golden Resources Hotel

TA. Shiping 500kV Transformer Substation
The construction of 500kV Shiping Substation started in 1998 and was completed in two phases. In Phase 1, a 220kV switch field was installed for operation on September 26, 1998. In phase 2, two 500kV transformers were put into official operation on July 1, 2005. As a key link of the Chongqing 500kV grid program, 500kV Shiping Substation has tremendously reinforced the capability and safety of the power supply in urban area of Chongqing. It can be sufficiently recognized as one guarantee of power supply to promote the development of Chonqing, as well as the construction of the greater western regions of China.

TB. Dazu Stone Carvings
Dazu Stone Carvings were built during the later period of the Tang Dynasty (A.D. 618 - 907), and prosperous in the Song Dynasty (A.D. 960 - 1279). With their substantial scale, exquisite craftsmanship, and superb preservation condition, equal or even surpass China's other Buddhist caves. They brought the Chinese grotto art to the last, further higher stage, when it went on declining in northern China. More than 60,000 Buddhist, Taoist and Confucian origins are interwoven here. Good number of sculpture works shows ancient people's life in this region. The Buddhist carvings seemed to be more secular than religious. They are excellent masterpieces of the grotto art of China.

Night View Tour by Cruise
Oct 25(WED) 19:00 ~ 22:00
Departure Time: 18:20
Assembly & Return Site: Lobby Hall, Golden Resources Hotel
Cost: Free

The Yangtze and Jialingjiang River cruise for evening party and night tour around Chongqing. Route: Haineiwudun—Yangtze River—Changjiang Bridge—Jialing River—Jialingjiang Bridge—Haineiwudun

6.4 Post- conference Tours

PA: Four-day Tours to Yangtze (Changjiang) River Three Gorges
Date: Oct 26-29
Price: US$ 300/per person (RMB2400￥) for people from the US and Europe
US$ 250/per person (RMB2000￥) for others
Coverage: accommodation on the 5-star cruise ship，traveling by local coach，three meals of buffet and five meals for lunch and dinner，admission to the scenic spots，tour guide fee，responsibility insurance of the tourist company and accidental insurance.

PB: Three-day Tours to Jiuzhaigou and Huanglong Valley Scenic and Historical Interest Area
Date: Oct 27-29
Price: US$ 450/per person (RMB3600￥)
Coverage: round-trip tickets, additional petrol taxes, airport passenger facility charges, accommodation in 4-star hotel, six meals (two for breakfast, four for lunch or dinner), admission to scenic spots, tour guide fee, responsibility insurance of the tourist company and accidental insurance.

Note: The amount above for both PA and PB is only for double room accommodation. For single occupation, the amount should be multiplied by a coefficient of 1.75. The designated price does not include individual expenses and some extra fees.

Please refer to http://www.conference-power.com/2006/tour.html for details about the above-mentioned marvelous scenic spots.

7. ACCOMPANYING PERSON PROGRAM

One-and-a-half-day local tours are scheduled for companions and leisure during the conference. If you want to apply the Accompanying Person Program, please fill the registration form on-line.

OCT 23(MON) 09.00 ~16.00
Tour Route: Huguang Guild Hall- Ciqikou Old Town- The People's Assembly Hall (Chinese style lunch included)
Huguang Guild Hall: with a long history of 250 years, the largest-scale preserved old guild hall in China, represents south China's architecture art in Ming and Qing Dynasty.
Ciqikou Old Town: A scant 1000-year-old town, shows how exactly old Chongqing looked like.
The People's Assembly Hall: pseudo-classic architectural complex, built from 1951-1954, covers an area of 66,00 square meters, national 4A scenic spot.

OCT 24(TUE) 09.00 ~ 12.00
Tour to Jiefangbei (Liberation Monument) Pedestrian Mall
Jiefangbei (Liberation Monument) Pedestrian Mall: the largest shopping mall in the west part of China. Liberation Monument is the historical witness to the winning of Anti-Japanese War and the liberation of Chongqing City.

Assembly Time: 08:30 Oct 23 ~ 24
Assembly and Return Site: Lobby, Golden Resources of Hotel

8. ACCOMMODATION

Appointed Travel Agency

Great Three Gorges International Travel Service (GITS) in Chonqing takes care of hotel and tour reservation at the special conference rates. Reservations will be made on a first-paid, first-served basis. Please visit http://www.conference-power.com/2006/hotel.html for more details and remember to indicate your order of preference on the hotel booking form.
Contact Clerk: Ms Guan Zhengfu
Tel: +86-23-63866697
Fax: +86-23-63855212
E-mail: ghanfei@hotmail.com or hanjiajia1212868@sina.com

About the Chongqing Golden Resources Hotel

Chongqing Golden Resources Hotel is located at Guanyinqiao, Jiangbei District. It is one of few deluxe business hotel designed as super five-star standard in southwest China. It prides itselft on perfect facilities and great service, especially the sleepless town underground connecting the underground mall at the Citizen Central Park, which supplies a wonderful place for amusement, shopping and entertainment.

Hotel (check-in/check-out)	**Room Type**	**US$(RMB￥)**
Golden Resources Hotel **(12:00/14:00)** **ADD**: No.1, 2nd Branch Jianxin North Road, Jiangbei District, Chongqing, 400020 China **TEL**:(+8623)67958888 **FAX**:(+8623)67959999 http://www.grhotel.cn/eng/main.asp	HL1: Superior/Deluxe Single Room	US$58(RMB￥460)
	HL2: Superior Double Room	US$58(RMB￥460)
	HL3: Superior Single Room	US$95 (RMB￥760)
	HL4: Deluxe Single Suite	US$102 (RMB￥810

*Charges are per room (single or double), per night, with breakfast.

9. INFORMATION ABOUT CHONGQING

About Chongqing

Chongqing is a famous cultural city as well as a modern city with an ancient history spanning more than 3,000 years. It is the nation's fourth municipality after Beijing, Shanghai and Tianjin. Situated in the upper reaches of the Yangtze River and at the confluence of Yangtze and Jialing Rivers in Southwest China, Chongqing is a port city with a large area of 82,400 square kilometers and a population of over 30 million. It is also the symbol of Changjiang civilization and the cradle of Bayu culture. Chongqing attracts visitors from home and abroad for its cultural heritage and tourist attractions. The city is the starting point of the Yangtze River Cruise, which is expected to explore the wonderful scenery of the Three Gorges

Chongqing's nickname is as the “Fog City”, or “Furnace”, or “Mountain City”, which comes from the fact that it has plenty of night rain all year round, with high temperature in summer and crisscrossed by mountains. The mid-October is autumn weather in Chongqing city, with average temperature ranging from 15°C to 25°C.

Transportation

The conference does not arrange the transportatin between Chongqing Jiangbei International Airport (the only airport in the city) and accomodation hotels. Delegates can take taxi, which is very convenient, around 25-minute ride with a cost of RMB60￥from Jiangbei International Airport to Golden Resources Hotel.

POWERCON2006 Secretairat

Please visit the conference website for more details: http://www.conference-power.com/2006
If you have any inquiry, you can contact the Powercon2006 Secretariat at:

Ms. Xie Yifan, Ms. Ye Jin, Ms Chongshan
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Qinghe, Beijing, China 100085
Tel: 86 10 62916913 & 86 10 82812560
Fax: 86 10 62916913
E-mail: 2006@conference-power.com or powercon2006@epri.ac.cn

10. PRESENTATION GUIDELINES

Guidelines for Oral Presentations

Each oral paper author is required to prepare visual material (e.g., slides in MS-Power Point) to be displayed on the screen in session room. Well-constructed slides can make your presentation more exciting, effective and memorable. However, in order for the slides to accomplish this, it is critical that they be properly planned and prepared. The guidelines on these pages are designed to help you make the most of your visual presentation.

Presentation Overview

Your visual presentation should emphasize the most important points of your oral presentation. Use the slides to reinforce, clarify, illustrate or highlight individual points. Slides are illustrating, not repeating, your presentation. Some key points to remember when preparing your slides:

- Simplicity is a key
- Focus on one idea at a time
- Do not repeat word-for-word on the slide

- Keep statements simple
- Use only essential information
- Experiment with a variety of layouts to determine the most effective ones
- Consider audience size
- Consider handing out copies of your visual presentation

General Guidelines
- Keep it simple
- Keep your audience in mind
- Proofread very carefully
- Fonts should be clear and easy to read
- Colored fonts should have a dark background
- Avoid using shades of the background color for titles or details
- Avoid using company/school PowerPoint templates
- Test your presentation ahead of time

Text Pointers
- Avoid using more than six or seven words per line, six or seven lines per visual
- Eliminate words that do not add meaning
- Avoid complete sentences
- Be consistent in grammatical construction of lists
- Use bullets at beginning of lines to separate ideas
- When using PowerPoint, use functions that allow you to build information

Title Pages
Use title pages to introduce new topics or add special emphasis to a very important point.

Specific Guidelines

- Equipment & Presentation File

1. The presenter is asked to make his/her presentation using a LCD (Liquid Crystal Display) projector (for connection with MS-Windows computer) prepared by the conference.
2. The presenter is asked to prepare a MS-Power Point file for presentation slides. Please use a USB-memory stick or a CD-ROM for loading your presentation onto the personal computer.
3. All presentations are required to be compatible with MS-Power Point. Please make sure that all fonts used in your presentation are in English (Asian, Russian or Arabic fonts might not be displayed properly by the PC projector). Macintosh users should make sure that their files can be read by a MS-Windows computer.
4. All presenters are required to load their presentations onto the hard drive of the session room computer 30 minutes before start time of their scheduled session.
5. Presenters can also bring their own laptop or notebook PC to drive the presentation. Power source voltage of wall outlet in China is 220 volts.

- General Information

1. Pre-session Meeting
Please arrive at the meeting room 30 minutes prior to the start of your session, to meet your session Chairperson. Please hand your short biography to the Chairperson. At this meeting, the Chairperson may show how to proceed the session.
2. Time Allowance
Careful time keeping is vital to ensure smooth operation of the entire program. Session Chairperson will request all presenters keeping the time allocated. Usually the time allowance for each presenter is around 15 minutes including the time of question and answer.

Guidelines for Presenting Poster Presentations
Each poster paper author is required to prepare visual material (e.g., black-and-white or colour sheets of paper, photographs, or a single large poster) to be displayed on a poster board. The material will be attached to the board with an adhesive tape or thumb-tacks. Well-constructed poster presentation papers can make your presentation more exciting, effective and memorable. However, in order for the poster papers to accomplish this, it is critical that they be properly planned and prepared. The guidelines on these pages are designed to help you make the most of your poster presentation.

Presentation Overview
Some key points to remember when preparing your poster presentations:
- Simplicity
- Keep statements simple and to the point
- Use only essential information which supports your statements
- Experiment with a variety of layouts to determine the most effective ones
- Consider handing out copies of your original written version of submitted paper

General Guidelines
- Use a few (i.e., perhaps 6 to 8) bullet-type text, charts, figures, tables, equations, etc. to indicate as well as highlight the important technical content of your paper. **Simply posting the pages of the written version of your paper is not an effective Poster Paper Presentation.**
- Provide an Introduction and an outline or Conclusion for your Poster Presentation.
- Be prepared to use your "Poster Paper Presentation" as the basis to briefly explain the work it describes and to answer specific questions from viewers.

Visual Aids
- Poster Space: Plan on using a board with an area of 2.4 meter high and 0.9 meter wide.
- The title of your poster paper should be displayed in block letters which are big enough to attract attention of viewers in distance of 2.5 meter.
- All text must be easily readable from a distance of 2 meters. Make the lettering at least 1 cm high, anything smaller cannot be read from that distance.
- All graphs and charts should be at least 15 X 20 cm or preferably even larger.
- It is a good idea to sequentially number your materials. This will indicate to the viewers a logical progression through your Poster Paper Presentation.

Presentation
- There will be three poster sessions at this Conference. Each poster has been assigned a location and a date and time when the poster should be manned by the author during the poster session on the day indicated in the Conference Program.
- The poster papers should be hung on the poster board by the session starting time on the day of presentation. The poster should be removed at the end of that poster session.
- Locate the poster board with your Poster Paper number (e.g., F0238, C0380, etc.) on. Poster papers may be mounted by using adhesive tapes (supplied by the conference).

- It is very helpful to have on hand copies of the written version of your paper, as well as a supply of business cards for those viewers who may want to study aspects of your work for more detail. Some viewers may wish to contact you at a later date.

A typical structure of a poster presentation is similar to slides of an oral presentation, often including:

- A title viewgraph, together with the names of authors and their affiliations
- Outline of the presentation
- Motivation and problem definition
- Background with a literature review
- Main body of the paper
- Experimental results and their discussion
- Conclusions & Acknowledgements

Supplied Facility

Each poster will be provided with a 0.9m (width) × 2.4m (height) board in the poster area. Adhesive tapes or thumb-tacks will be offered during the poster time.

Poster Session Chair

Poster Session Chair, Mr Shanbin Pu, will check around and take care of all poster sessions during the time. Make sure that for no special reasons, any poster presenter is not allowed to be absent from scheduled session.

Poster Schedule

	Date	Set up	Removal	Site
Poster Session 1(PS1)	Oct 23 PM	13:30-14:00	17:00-17:30	Banquet Hall No.4b
Poster Session 2(PS2)	Oct 24 AM	08:30-09:00	12:00-12:30	
Poster Session 3(PS3)	Oct 24 PM	13:30-14:00	17:00-17:30	

Note: Posters on the boards of past time schedule will be removed by conference staff, who will not assume any responsibilities for reserving these materials.

11. TECHNICAL PROGRAM

11.1 General Information

Venue: Chongqing Golden Resources Hotel

Meeting at a Glance by Day

Meeting Room	No. 1a	No. 1b	No. 3	No. 5	No.6	No. 10	IC	BH4a	CR	BH4b
Oct. 23, AM	**Opening Ceremony & Keynote Speeches (KS1)** (Banquet Hall 2, 3F, Golden Resources Hotel)									
Oct. 23, PM	MK1	SM1	SC1	AP1	PL1	PQ1	PN3	PR1	PN4	PS1
Oct. 24, AM	MK2	PN1	SC2	AP2	PL2	PQ2	PN2	PR2	DS1	PS2
Oct. 24, PM	UH1	SM2	SC3	ST1	AP3	FA1	WAC	PR3	DG1	PS3
Oct. 25, AM	MK3	SM3	SO1	PE1	EM1	PQ3	DC1		DG2	
Oct. 25, PM	MK4	SM4	IN1	VS2	EM2	VS1	DC2		DS2	

Meeting Room List

No.1a: Conference Hall No.1a, 3rd Floor, Golden Resources Hotel
No.1b: Conference Hall No.1b, 3rd Floor, Golden Resources Hotel
No.3: Conference Hall No.3, 3rd Floor, Golden Resources Hotel
No.5: Conference Hall No.5, 3rd Floor, Golden Resources Hotel
No.6: Conference Hall No.6, 3rd Floor, Golden Resources Hotel
No.10: Conference Hall No.10, 3rd Floor, Golden Resources Hotel
IC: International Conference, 3rd Floor, Golden Resources Hotel
BH4a: Banquet Hall No.4a, 3rd Floor, Golden Resources Hotel
CR: Conference Room, 5th Floor, Golden Resources Hotel
BH4b: Banquet Hall No.4b, 3rd Floor, Golden Resources Hotel

Session List

1. KS1 Keynote Speeches
2. PN1: Panel Discussion: Energy Storage Technologies
3. PN2: Panel Discussion: On-line Reliability Assessment and Control
4. PN3: Panel Discussion: HVDC and FACTS Technologies
5. PN4: Panel Discussion: Communications for Distribution System
6. AP1: Apparatus 1
7. AP2: Apparatus 2
8. AP3: Transformer
9. DC1: HVDC
10. DC2: HVDC and FACTS
11. DG1: Wind Farm and DG 1
12. DG2: Wind Farm and DG 2
13. DS1: Distribution System 1
14. DS2: Distribution System 2
15. EM1: SCADA and EMS 1
16. EM2: SCADA and EMS 2
17. FA1: FACTS
18. IN1: Information System
19. MK1: Power Market 1
20. MK2: Power Market 2
21. MK3: Power Market 3
22. MK4: Power Market 4
23. PE1: Power Electronics
24. PL1: Power System Planning 1
25. PL2: Power System Planning 2
26. PQ1: Power Quality 1
27. PQ2: Power Quality 2
28. PQ3: Power Quality 3
29. PR1: Protection 1
30. PR2: Protection 2
31. PR3: Protection 3
32. SC1: System Control 1
33. SC2: System Control 2
34. SC3: System Control 3
35. SO1: System Operation
36. SM1: System Simulation 1

37. SM2: System Simulation 2
38. SM3: System Simulation 3
39. SM4: System Simulation 4
40. ST1: Substation
41. UH1: UHV Transmission
42. VS1: Voltage Stability 1
43. VS2: Voltage Stability 2
44. WAC: Wide Area Protection and Control
45. PS1: Poster Sessions 1
46. PS2: Poster Sessions 2
47. PS3: Poster Sessions 3

11.2 Technical Sessions (Monday, Oct. 23 AM)

Opening Ceremony

Chairperson: Yusheng Wu, CSEE, China
Place: **Banquet Hall No.2**, 3F, Golden Resources Hotel
Time: Monday 09:00-09:40 AM, Oct. 23, 2006

Welcome Speakers:
1. Mr. John D. McDonald, President, IEEE/PES, USA
2. Mr. Yanchang Lu, President, CSEE, China

Special Speaker:
3. Mr. Lu Qizhou, Vice President, SGCC, China

Keynote Speeches

Session Chairperson: Wentao Zhang, CEPRI, China
Place: **Banquet Hall No.2**, 3rd Floor, Golden Resources Hotel
Time: Monday 09:40-12:15 AM, Oct. 23, 2006

KS1-01 C1573
Development of UHV Transmission in China and Compatibility to the System
Zehong Liu

KS1-02 C1574
Power Technology in China Southern AC/DC Hybrid Power Systems: Opportunities, Challenges, and Vision
Xiaochen Wu

KS1-03 F1581
Large Transmission System Development
Yves Filion

KS1-04 F1582
Wind Farm Interconnections
Bjarne Andersen

The Future of Electric Power Engineering - The contribution of Technical Associations
12:15-12:30 AM
Jean Kowal, General Secretary, CIGRE

11.3 Technical Sessions (Monday, Oct. 23 PM)

MK1: Power Market 1

Session Chairperson: Fangxing Li, University of Tennesee, USA
Place: **No. 1a** - Conference Hall No.1a, 3rd Floor, Golden Resources Hotel
Time: Monday 14:00-17:30 PM, Oct. 23, 2006

MK1-01 F1114
Application of the Locational Marginal Pricing Model in North China Grid: A Preliminary Study
Kai Xie, Changming Jiang, Zhe Zhang, Xu Xie, Xiaofeng Xu, Xingwang Ma, David Sun

MK1-02 F1119
Real Power Loss Allocation for Transactions in Bilateral Markets
Komson Daroj, Bundhit Eua-Arporn

MK1-03 C0763
Bidding Decision-Making Support System for Power Supplier based on Multi-Agent System
Qian Zhang, Jihui Yu

MK1-04 F1128
Reliability Evaluation of 115 kV Distribution System for Pricing Services in Bilateral Contract Electricity Markets by Application Fuzzy-Logic Method
Chamni Jaipradidtham

MK1-05 C1204
The Study on Pricing Policies and Trading Mechanism of Distributed Generation
Bin Hu, Shouzhen Zhu, Jinghong Zheng, Jin Xu

MK1-06 F1556
Comparison of Different LMP Calculations in Power Market Simulation
Fangxing Li, Rui Bo, Wenjuan Zhang

MK1-07 C1345
Optimal Scheduling of Hydropower plant with Uncertainty Engergy Price Risks
Chengjun Zhu, Jianzhong Zhou, Junjie Yang, Wei Wu

MK1-08 F1565
Test of Asymmetry Effect of Demand on Spot Price Using MCMC Methods
Xuebing Lu, Ly Fie Sugianto, Vincent Lee

SM1: System Simulation 1

Session Chairperson: J.N.Y.Cheung, C&S Group, Australia
Place: **No.1b** - Conference Hall No.1b, 3rd Floor, Golden Resources Hotel
Time: Monday 14:00-17:30 PM, Oct. 23, 2006

SM1-01 C0232
Power System Transient Stability Simulation under Uncertainty based on Interval Method
Shouxiang Wang, Zhijie Zheng, Chengshan Wang

SM1-02 C0691
Study on Dynamic Characteristics of Electromechanical Wave in the Continuum Model for Power System
Delin Wang, Xiaoru Wang, Yi Fang, Wenbin Hao

SM1-03 C0748
Analysis of the Failure in a Turbine-Generator Shaft
Yanhui Xu, Renmu He

SM1-04 C0829
Impact of Characteristic Path Length on Cascading Failure of Power Grid
Xiaogang Chen, Quanyuan Jiang, Yijia Cao

SM1-05 C1159
Study on Inter-area Oscillation Frequency of Power Systems
Qing Wang, Yiwei Zhang, Yong Min

SM1-06 F1180
A Power Systems Analysis Software Package For Open Electricity Markets
Joseph Nai-yee Cheung

SM1-07 C1267
Power System Transient Stability Simulation Using the Precise Time-Integration Method
Xianrong Chang, Yubin Wang, Lifeng Hu

SM1-08 C1307
A Distributed-Computing-based Eigenvalue Algorithm for Stability Analysis of Large-scale Power Systems
Xu Zhang, Chen Shen

SC1: System Control 1

Session Chairperson: Q.H.Wu, University of Liverpool, UK
Place: **No.3 -** Conference Hall No.3, 3rd Floor, Golden Resources Hotel
Time: Monday 14:00-17:30 PM, Oct. 23, 2006

SC1-01 F0039
Economic Load Dispatch for Piecewise Quadratic Cost Function using Hybrid Self-adaptive Differential Evolution with Augmented Lagrange Multiplier Method
Chainarong Thitithamrongchai, Bundhit Eua-Arporn

SC1-02 F0066
Transfer Capability of Long Transmission Lines as Affected by Shunt Compensation
Qi Wang, San Shing Choi, Mohammed Hamidul Haque

SC1-03 C1283
Optimization of Power Factor for Operation of Small Hydro Stations
Jinlei Hu, Yao Zhang, Li Guo, Huifan Xie

SC1-04 F0235
Increasing of Dynamic Thermal Rating of Transmission Line
Udomkarn Samanmit, Songsak Chusanapiputt, Vuthichai Pungprasert

SC1-05 F0407
Relativity Pheromone Updating Strategy in Ant Colony Optimization for Constrained Unit Commitment Problem
Songsak Chusanapiputt, Dulyatat Nualhong, Sujate Jantarang, Sukumvit Phoomvuthisarn

SC1-06 C1438
Preventive/Corrective Control for Voltage Stability based on Primal-Dual Interior Point Method
Yue Yuan, Xuehong Wen, Kejun Qian

SC1-07 F1154
Optimal Power Flow With Dynamic Loads Using Bacterial Foraging Algorithm
W.J. Tang, M.S. Li, S. He, Q.H. Wu, J.R. Saunders

AP1: Apparatus 1

Session Chairperson: Ying Xin, Innopower Superconductor Cable, China
Place: **No.5 -** Conference Hall No.5, 3rd Floor, Golden Resources Hotel
Time: Monday 14:00-17:30 PM, Oct. 23, 2006

AP1-01 C0057
Calculation of Short-circuit Mechanical Strength for PowerformerTM
Shishan Wang, Zeyuan Liu, Yanming Li, Yinna Guo, Hong Gao

AP1-02 C1189
Modeling of the Transformer Windings under VFTO based on Transfer Function
Xile Zhang, Guishu Liang, Qing Xie, Haifeng Sun

AP1-03 C0423
Development of Superconducting Fault Current Limiters
Ying Xin, Weizhi Gong, Xiaoye Niu, Zhengjian Chao, Haixia Xi, Jingyin Zhang, Yang Wang, Bo Tian, Bo Hou

AP1-04 C1002
An Online Temperature Measurement System Based Wireless Communication Technology
Niancheng Zhou, Jingwei Zhang, Hong Gan

AP1-05 C1022
Research on Energy Efficiency of Supercapacitor Energy Storage System
Yun Zhong, Jiancheng Zhang, Gengyin Li, Aiguo Liu

AP1-06 F1082
Very Fast Transient Oscillations Measurements at Three Gorges Left Bank Hydro Power Plant
Jochen Christian, Jun Xie

PL1: Power System Planning 1

Session Chairperson: Jean Kowal, CIGRE, France
Place: **No.6 -** Conference Hall No.6, 3rd Floor, Golden Resources Hotel
Time: Monday 14:00-17:30 PM, Oct. 23, 2006

PL1-01 F0216
Non-Coherence in Transmission Line Arrangements
Wenyuan Li, Jiaqi Zhou, Kaigui Xie, Xiaofu Xiong

PL1-02 F0223
Technical and Economic Comparisons between Two Major Projects Planned to be Constructed in the United States Southwest Region
James Hsu, Steve Mavis, Tim Wu, Kishore Patel, John Kyei

PL1-03 F0510
Main Principles of Electrical Network Expansion in a Market Environment of Russia
Nikolai I. Voropai

PL1-04 F0872
Optimal SVC and TCSC Placement for Minimization of Transmission Losses
Somchai Biansoongnern, Songsak Chusanapiputt, Sukumvit Phoomvuthisarn

PL1-05 F1127
Transient Shunt Reactor Dimensioning for Bulk Power Transmission Systems during Normal and Faulty Network Conditions
Mathias Ramold, Gina Idarraga, Johann Jäger

PL1-06 F1281
A New Approach to Determine Base, Intermediate and Peak-Demand in an Electric Power System
A. Salimi-beni, Mahmud Fotuhi-Firuzabad, Davod Farrokhzad, S. J. Alemohammad

PL1-07 F1524
A Study of Series Capacitor Effects on Total Transfer Capability of the Central-to-southern Thailand Transmission System
Naebboon Hoonchareon, Bodin Kosolpisit, Songsak Chunsanapitak, Sukumvit Phoomvuthisarn

PQ1: Power Quality 1

Session Chairperson: S. Chen, Nanyang Technological University, Singapore
Place: **No.10** - Conference Hall No.10, 3rd Floor, Golden Resources Hotel
Time: Monday 14:00-17:30 PM, Oct. 23, 2006

PQ1-01 C0122
Detecting Methods of Harmonic in Power System based on Wavelet Transform
Yuanyuan Liu, Maojun Li

PQ1-02 F0470
A Conceptual View of Power Quality Regulation Using Market-Driven Mechanism
Shiun Chen, Jing Wang, Tek Tjing Lie

PQ1-03 C0687
Partial Least-squares Regression based Harmonic Emission Level Assessing at the Point of Common Coupling
Yonghai Xu, Shun Huang, Yingying Liu

PQ1-04 C0781
Radial Basis Function Neural Network Based Comprehensive Evaluation for Power Quality
Yingying Liu, Guodong Li, Qiang Gu, Yonghai Xu

PQ1-05 F1020
A Morphological Filter for Estimation of Power System Harmonics
Z. Lu, Q.H. Wu, J. Fitch

PQ1-06 C1306
Synthetic Evaluation of Power Quality based on Fuzzy Cluster Analysis
Xiangying Duan, Ming Zhou, Gengyin Li, Jin Yang

PQ1-07 F1151
Harmonic Analysis for the Distribution System with Dispersed Generation Systems
Y. D. Lee, C. S. Chen, C. T. Hsu, H. S. Cheng

PQ1-08 C1422
Harmonic Analysis and Suppression Methods Study of Cycloconverter-feed Synchronous Motor Drive System
Mingyu Wang, Yang Li, Bingbing Tan, Bingjuan Wei

PN3: Panel Discussion 3: HVDC and FACTS Technologies

Session Chairperson: Aty Edris, EPRI, USA
Co-sponsor: **CIGRE SC B4**
Place: **IC** - International Conference, 3rd Floor, Golden Resources Hotel
Time: Monday 14:00-17:30 PM, Oct. 23, 2006

PN3-01 F1591
800 kV HVDC for Transmission of Large Amount of Power Over Very Long Distances
Gunnar Asplund

PN3-02 F1588
Technical and Economic Aspects of Tripole HVDC
Lionel Barthold

PN3-03 F1589
The Use of FACTS to Facilitate Multi-infeeds of HVDC
Bjarne Andersen

PN3-04 F1590
FACTS Applications
Norman Macleod

PN3-05 C0619
Investigation of Several New Technologies for Mega City Power Grid Issuesv
Justin-Jin Zhang, Qianjin Liu, Christian Rehtanz, Staffan Rudin

PN3-06 F0655
Optimal Power Flow Control for Congestion Management by Interline Power Flow Controller (IPFC)
Jun Zhang, Akihiko Yokoyama

PR1: Protection 1

Session Chairperson: Xinzhou Dong, Tsinghua University, China
Place: **BH4a** - Banquet Hall No.4a, 3rd Floor, Golden Resources Hotel
Time: Monday 14:00-17:30 PM, Oct. 23, 2006

PR1-01 F0509
Effects of Instrument Transformers Connection point on Measured Impedance by Distance Relay in Presence of SSSC
Ahad Kazemi, Sadegh Jamali, Hossein Shateri

PR1-02 C0331
Accurate Fault Location Principle by Means of Projection Operator for Distributed Parameter Transmission Lines
Hengxu Ha, Benguo Zou, Jing Wang, Lei Wang, Bo Chen, Dapeng Wang

PR1-03 F0580
Measured Impedance by Distance Relay Considering Double π Model of the Line Capacitance
Sadegh Jamali, Hossein Shateri

PR1-04 C0669
Simulation Tests of a Novel Criterion for Neutral Current Differential Protection
Min Zhang, Xinzhou Dong, Zhiqian Bo, Ben Caunce, Andrew Klimek

PR1-05 F1089
Adaptive Protection Co-ordination Methods Concerning a Dedicated Operation of Large IPP Units Connected to the Transmission Grid
Johann Jaeger, Mathias Ramold, Li Shang

PR1-06 C1059
Research on Relative Synchronization of Data Sampling at UHV line Two Terminals
Zhengxuan Huang, Jian Lou, Kunming Tang, Liting Lu, Zhuguo Ou

PR1-07 F1547
Adaptive Blinder for Distance Relays based on Sensitivity Factor
Seong-Il Lim, Han-Chuan Yuan, Seong-Jeong Rim, Seung-Jae Lee, Myeon-Song Choi

PN4: Panel Discussion 4: Communications for Distribution System

Session Chairperson: Mladen Kezunovic, Texas A&M University, USA
Place: **CR** - Conference Room, 5th Floor, Golden Resources Hotel
Time: Monday 14:00-17:30 PM Oct.23, 2006

PN4-01 C1592
Future Communication Needs for Distribution Feeder Automation
Lei Jing

PN4-02 F1593
The Needs for Integration of the Feeder, Substation and System-wide Communication Solutions for Distribution Automation
Mladen Kezunovic

PN4-03 C0890
The Application of Communication in the DA System
Hua Zhang, Huayong Liu

PN4-04 C0115
Monitoring System of Distribution Running States Based on Broadband Power Line Communication
Xu Zeng, Ming Liang, Huaizhi Liu, Yan Ren, Rui Yang

PN4-05 C1116
The Study of Feeder Automation System based on Quick Communication Mechanism
Wen Xu, Xiaolan Liu, Yanjun Wen, Haitao Jiang, Qiang Zhang, Jianmin Zhang, Yu Gao

PN4-06 F1598
Communication Standards for Distribution Automation and Customer Load Control
Mark Lauby

PS1: Poster Sessions 1: PL, PR, SC, SO, EM, VS

Session Chairperson: Shanbin Pu, China Electric Power Research Institute, China
Place: **BH4b** - Banquet Hall No.4b, 3rd Floor, Golden Resources Hotel
Time: Monday 14:00-17:30 PM Oct.23, 2006

PS1-01 C0090
Quantitatively Estimating & Evaluating Macroscopic Scale of Power Transmission & Distribution Network
Yanghua Liu, Xinran Li, Xiangyou Zhu, Zhengqiu Wu, Shunjiang Lin

PS1-02 C0428
Adaptive Impedance Relay with Composite Polarizing Voltage
Qiankuan Liu, Shaofeng Huang

PS1-03 C0484
Overall Evaluation of the Supply Capability in Distribution Networks based on Fuzzy Method
Wei Huang, Jianhua Zhang, Yanping Zhang, Jingyan Yang, Yong Kong

PS1-04 C0515
A Novel Nonlinear Programming Model for Contingency Clearing Time Calculation
Yude Yang, Hua Wei

PS1-05 F0562
Optimal Expansion Planning of Traction Substations for an Electrified Mass Rapid Transit System
Hui-Jen Chuang, Chao-Shun Chen, Chia-Hung Lin, Jun-Yu Chen, Chin-Yin Ho

PS1-06 C0658
Research on Sensitivity Analysis for Composite Generation and Transmission System Reliability Evaluation
Yuan Zhao, Niancheng Zhou, Jiaqi Zhou, Xia Zhao

PS1-07 C0680
Application of a Microhabitat Particle Swarm Algorithm in Transformer Substation Optimization
Fangjie Wu, Chengxue Zhang, Jingchao Zhang, Zhiyuan Duan

PS1-08 C0787
A New Algorithm for Distribution Network Planning
Xianbo Ke, Weixin Gao, Xiaobing Li

PS1-09 C0842
Research on Illed-Conditioned Equations in Tracking Thevenin Equivalent Parameters with Local Measurements
Tianyu An, Suquan Zhou, Jilai Yu, Wen Lu, Yanjun Zhang

PS1-10 C0913
A New Method of Computing the Controlling Unstable Equilibrium Point of the Post-fault Power System
Xiaoyang Wang, Yong Min, Kaiyuan Hou

PS1-11 C0964
Probabilistic Security Evaluation of Bulk Power System Considering Cascading Outages
Yunting Song, Hailei He, Dongxia Zhang, Jianbo Guo

PS1-12 C1170
Data Analysis for Assessing the Reliability of a 132 kV Transmission System in Sulaimani-Erbil Network
Ghamgeen Rashed, Asso Majeed, Shijie Cheng

PS1-13 C1245
Research of Transient Stability Margin Affected by Single-phase Reclosing
Hongchun Shu, Shiyun Sun, Jun Dong, Xuqian Li, Zelong Liao, Wen Wang, Qiang Yang

PS1-14 C1364
Probabilistic Power Flow Calculation Using Sigma-Point Transform Algorithm
Sige Liu, Xiaoxin Zhou, Mingtian Fan, Zhuping Zhang

PS1-15 C0063
A Newly Developed Line Protection with Ethernet Communication Interface based on IEC61850
Hui Hou, Dahai You, Xianggen Yin, Tianqi Xu, Mingliang Jin, Xiongkai He, Bo Wang, Yubing Xie

PS1-16 C0069
Application of Adaptive Generalized Morphological Filter in Disturbance Identification for Power System Signatures
Tingfang Yang, Pei Liu, Xiangjun Zeng, K.K. Li

PS1-17 C0102
A New Method to Realize the Relay Protection of AOCT Following IEC61850
Jian Zhang, Zhenhai Yuan, Yansong Li, Zhizhong Guo

PS1-18 C0164
Design and Analysis For Reliability of Control Function in Substation Automation
Wen Wang, Wei Lin, Wenjun Duan, Xiao Ma

PS1-19 C0191
A New Technique to Identify Internal Faults and Inrush Currents Using Morphological Gradient with Adaptive Filtering
Jing Ma, Zengping Wang, Yan Xu, Haofang Liu

PS1-20 C0198
Study on Line Detection and Fault Location with Automatic Track Arc Suppression Coil Device
Linshu Li, Luping Jiang

PS1-21 C0725
A Transmission Line Unit Protection Technique Based Combination Modulus by Using Mathematical Morphology
Yuqin Xu, Zengping Wang, Jia Bai, Hai Zhang

PS1-22 C0806
Optimal Coordination of Distance Relays in Interconnected Power Systems
Zengli Yang, Dongyuan Shi, Xianzhong Duan

PS1-23 C0807
Setting Calculation of the Directional Relays Considering Dynamic Changes in the Network Topology
Xiongping Yang, Dongyuan Shi, Xianzhong Duan

PS1-24 F0873
A Two-terminal Fault Location Approach based on Unsynchronized Phasors
André Luís Dalcastagnê, Sidnei Noceti Filho, Hans Helmut Zürn, Rui Seara

PS1-25 C0956
Theoretical Analysis of Differential Protection based on Sampled Values
Xiaohua Li, Xianggen Yin, Deshu Chen, Gang Wang

PS1-26 C0983
The Development of Arc-suppression Line Selection Device Based on PC104
Youdong Xu, Zhenhong Guo, Mingmei Zhang, Xinkuan Wang

PS1-27 C0994
Research on the Novel Comprehensive Fault Line Selection Method for the NUGS based on the Fuzzy Theory
Zhicheng Zhou, Junjia He, Xiang Li, Yunping Zou

PS1-28 C1067
Research on the Application of Wavepacket Decompostion based Non-unit Protection on the EHV Lines with Shunt Reactors
Yan Xu, Haofang Liu, Zengping Wang

PS1-29 C1316
Study of Non-unit Transient-based Protection for EHV Transmission Lines Using Backward Traveling-wave
Jiandong Duan, Baohui Zhang, Sibei Luo, Jinfeng Ren

PS1-30 C1444
A Travelling Wave Based Fault Locating System for HVDC Transmission Lines
Ping Chen, Bingyin Xu, Jing Li

PS1-31 C1503
Effect on Earth Fault Detection Based on Energy Function Caused by Imbalance of Three-Phase Earth Capacitance in Resonant Grounded System
Hongquan Ji, Yihan Yang, Hongbo Lian, Shu'an Cong

PS1-32 C0096
The Application of a Multi-Agent Technology in Relaying Protection
Jinai Zhang, Qianjin Liu

PS1-33 C0175
Transient Simulation Model and Its Simplified Method Validation for Huge Hydro Generator Internal Short Circuit Faults
Yongjun Xia, Xianggen Yin, Deshu Chen, Zhe Zhang, Wei Chen

PS1-34 C0203
A Novel Current Differential Protection Scheme for Powerformer
Qing Tian, Xiangning Lin, Wenjun Lu

PS1-35 C0344
Research on an Ultra-High-Speed Protection based on Multiresolution Morphological Gradient
Mingyu Yang, Shuping Tan

PS1-36 F0383
Protection Against Ground-Faults in Tetrapole Unit-Generator with Two Parallel Branches in Phase
Marek Fulczyk, Remigiusz Mydlikowski

PS1-37 C0743
Implementation of Data Acquisition and Processing IP core for Digital Protective Relay
Xiaojing Hu, Zhengxiang Song, Peng Li, Jianhua Wang, Yingsan Geng

PS1-38 C0975
Research on Integration of Transformer Protection and On-line Detecting Winding Deformation based on Equivalent Circuit Equation
Zhiguo Hao, Baohui Zhang, Peng Li, Yunlong Chu

PS1-39 C0999
Optimization of HVDC Converter Transformer Back-up Protection
Qing Liu, Zengping Wang, Liying Wu

PS1-40 C1060
Correlation Analysis of Waveforms in Non-saturation Zone Based Method to Identify the Magnetizing Inrush in Transformer
D. Q. Bi, X. A. Zhang, H. H. Yang, G. W. Yu, X. H. Wang, W. J. Wang

PS1-41 C0070
Distributed Algorithm of Multi-region Active Load in Power System Economic Dispatch
Hongshan Zhao, Qiang Li, Zengqiang Mi, Lei Wang

PS1-42 C0088
An Automatic Shedding Decision System for the Backup Protection of a Transmission Network
Wei Zhang, Zhencun Pan

PS1-43 F0134
Developing a Power System Dynamic Security Assessment System Part Ⅱ: Structure and Function Design and Technology Used
L.B. Shi, H.F. Zhou, Peter T.C. Tam, N.C. Chang, Z.B. Du, Y.X. Ni, Felix F. Wu

PS1-44 C0158
Damping Low-frequency Oscillation in AC/DC Power Systems based on Multi-operation Modes
Yanfeng Ma, Shuqiang Zhao, Xueping Gu

PS1-45 C0176
Power System Emergency Control based on Load Stratification
Jun Wu, Guangyu Tu, Yi Luo, Deshu Chen

PS1-46 F0187
Discussion on Parameters Setting and Loss of Exciter Time Constant Compensation in Excitation System
Whei-Min Lin, Chang-Lin Lee

PS1-47 C0832
A Hierarchical Control Scheme for Transient Stability Augmentation by Thyristor Controlled Braking Resistors
Xueyan Zhang, Shaofeng Huang

PS1-48 C0995
A New Method for Transmission-constrained Unit Commitment
Pengpeng Yang, Xueshan Han, Li Zhang

PS1-49 C1064
Design of a Nonlinear Global Integrated Controller based on Wide-area Information
Guangliang Yu, Baohui Zhang, Huan Xie, Benguo Zou, Liyong Wang, Lei Li

PS1-50 C1121
A New Scheme for Power System Emergency Control based on the OBDD Searching Method
Xinlei Wang, Chen Shen

PS1-51 C1203
A New Approach for Security Constrained Unit Commitment
Li Zhang, Jianguo Zhao, Xueshan Han, Pengpeng Yang

PS1-52 C1271
Coordinated Control of Power System Stabilizers and HVDC Damping Controller using Decentralized μ-synthesis
Rouyi Chen, Yao Zhang

PS1-53 C1519
Predictive Optimal Algorithm based Coordinated Voltage Control for Large Power System
Peng Ye, Qing Bian, Jiahua Song, Bing Yao

PS1-54 C0032
A New State Estimation Model of Utilizing PMU Measurements
Hongga Zhao

PS1-55 C0120
Intelligent Decision Support System for Power Grid Dispatching based on Multi-Agent System
Qiong Wu, Wenying Liu, Yihan Yang, Chuan Zhao, Yong Li

PS1-56 C0130
Theoretical Analysis of the Interaction between Power System Stability Modes with the Normal Forms of Vector Fields
Jing Zhang, Gang Li, Ahmed N. Abd-Alla, J. Y. Wen, S. J. Cheng

PS1-57 C0171
A New Algorithm for Distributed Power System State Estimation based on PMUs
Yan Li, Xiaoxin Zhou, Jingyang Zhou

PS1-58 C0341
Mutual Fault-tolerant and Standby SCADA System based on MAS for Multi- area Centralized Control Centers
Peng Ge, Guoqing Tang, Wen Xu, Xinran Li

PS1-59 F0353
Security-Constrained Economic Scheduling of Generation Considering Generator Constraints
Zwe-Lee Gaing, Rung-Fang Chang

PS1-60 C0949
Open Real-time Database and it's Application in Dispatching Automation Systems
Ning Zhou, Qi Ding

PS1-61 C1015
Study on Stability Mechanism for a Typical Fault with EEAC Theory
Weidong Yang, Yusheng Xue, Xiaofang Song, Di Wu, Fei Ge, Dawei Xie

PS1-62 C1029
Online Identification of Low-Frequency Oscillation in Power System based on Fuzzy Filter and Prony Algorithm
Dahu Li, Yijia Cao, Guang Wang

PS1-63 F1207
Cost Minimization in Power System Measurement Placement
Yang Wu, Mladen Kezunovic, Tatjana Kostic

PS1-64 C0010
A Quick Criterion on Judging Short-Term Large-Disturbance Voltage Stability Considering Dynamic Characteristic of Induction Motor Loads
Huadong Sun, Xiaoxin Zhou

PS1-65 C0140
Power System Voltage Stability Limits Estimation based on Quasi-Steady-State Simulation
Ning An, Shuangxi Zhou, Lingzhi Zhu

PS1-66 C0418
Reliability Assessment to Large-scale Power Grid based on Small-world Topological Model
Ming Ding, Pingping Han

PS1-67 C0429
Studies on Substation Voltage and Reactive Power Automatic Regulating Criteria
Jiwen Li, Xuelian Liu, Yubin Wang, Hongmei Li

PS1-68 C0582
A New Uncertain Fault Diagnosis Approach of Power System based on Markov Chain Monte Carlo Method
Wei Zhao, Xiaomin Bai, Jian Ding, Zhu Fang, Zaihua Li, Ziguan Zhou

PS1-69 C0937
Study of Fault Diagnosis for Power Network based on MAS
Peng Mao, Bin Chen, Hanli Weng

PS1-70 C0955
Study on Static Voltage Stability Assessment for Load Center Area
Jingfu Shang, Jianhua Zhang, Sheng Li

PS1-71 C0961
Study of Groud Flash Density
Shiyu Tang, Gaolin Wu, Hua Yin

PS1-72 C1014
A Study of Autoregressive Conditional Heteroscedasticity Model in Load Forecasting
Hao Chen, Jie Wu, Shan Gao

PS1-73 C1130
Research on Reactive Power Optimization based on Adaptive Genetic Simulated Annealing Algorithm
Keyan Liu, Wanxing Sheng, Yunhua Li

PS1-74 C1385
A Real-time Reactive Power/voltage Control System for Regional Power Grid based on Hierarchical Coordination
Cong Li, Yao Zhang, Li Guo

PS1-75 F1470
Security Constrained Economic Dispatch Using Interior Point Method
Kyoung Shin Kim, In Hak Jung, Seung Chul Lee, Un Chul Moon

PS1-76 C1559
Study of Probabilistic Available Transfer Capability by Improved Particle Swarm Optimization
Guoqing Li, Ruiyang Zhang, Houhe Chen

11.4 Technical Sessions (Tuesday, Oct. 24 AM)

MK2: Power Market 2

Session Chairperson: Yuanzhang Sun, Tsinghua University, China
Place: **No.1a** - Conference Hall No.1a, 3rd Floor, Golden Resources Hotel
Time: Tuesday 09:00-12:30 AM Oct.24, 2006

MK2-01 C0339
Reserve Capacity Allocation and Responsibility Partition Considering The Uncertain Factors In Electricity Markets
Xiangxing Meng, Xueshan Han, Dawei Huang

MK2-02 C0765
Sequential Monte Carlo Simulation Based Available Transfer Capability Calculation
Yajing Gao, Ming Zhou, Gengyin Li

MK2-03 C0864
The Principle and Constitution Process of Precaution Indexes System for Electricity Market
Dunnan Liu, Jingdong Xie, Linmin Xia, Guangyu He

MK2-04 F0439
Optimal Reactive Power Dispatch in a Joint Active / Reactive Market Model
Babak Mozafari, Touraj Amraee, A. M. Ranjbar, M. Mirjafari, A. R. Shirani

MK2-05 C1066
Coumot Equilibrium Analysis for Spot and Forward Gaming in a Transmission Constrained Electricity Market
Xiaobo Mi, Shaohua Zhang, Xian Wang, Yuzeng Li

MK2-06 C1331
Experience with East China Power Market IT Development and Operation
Yongping Zhang, Xin Jiang, Dexing Wang, Libing Yang, Liang Wang, Zhaoqiang Ge

MK2-07 C1335
Development and Application of Software for ATC Calculation
Rongfu Sun, Yue Fan, Yonghua Song, Yuanzhang Sun

PN1: Panel Discussion 1: Energy Storage Technologies

Session Chairperson: Xuehao Hu, China Electric Power Research Institute, China
Place: **No.1b -** Conference Hall No.1b, 3rd Floor, Golden Resources Hotel
Time: Tuesday 09:00-12:30 AM Oct.24, 2006

PN1-01 C1575
The Development Prospects of Renewable Energy and Distributed Generation in Power System and their Demand for Energy Storage Technology
Xuehao Hu

PN1-02 C1576
Study on Energy Storage Technology of Sodium Sulfur Battery and its Application in Power System
Zhaoyin Wen

PN1-03 C1577
Development Perspectives on Redox Flow Battery for Energy Storage Systems
Huamin Zhang

PN1-04 C1578
Study on SMES technology and its Application in Power System
Liye Xiao

PN1-05 C1579
Study on Super-capacitor Energy Storage Technology and its Application in Power System
Zhiping Qi

PN1-06 C1580
Study on Flywheel Energy Storage Technology and its Application in Power System
Zhiping Qi

SC2: System Control 2

Session Chairperson: Pei Zhang, Electric Power Research Institute，USA
Place: **No.3 -** Conference Hall No.3, 3rd Floor, Golden Resources Hotel
Time: Tuesday 09:00-12:30 AM Oct.24, 2006

SC2-01 F0634
Coordination of PSS and FACTS Damping Controllers in Large Power Systems for Dynamic Stability Improvement
Mojtaba Najafi, Ahad Kazemi

SC2-02 F0843
Adaptive PSS Designed based on Low-order Linear Model for Large-scale Power System
Toshio Sugihara, Akihiko Yokoyama, Atsushi Izena

SC2-03 C0465
Wide-area Robust Control for Damping Multiple Inter-area Oscillations
He Chen, Jing Chen, Xiying Chen, Hong Bai, Zhizhong Guo

SC2-04 F0852
Hybrid Immune Genetic Method for Dynamic Reactive Power Optimization
Fang Liu, CY Chung, K.P. Wong, Wei Yan, Guoyu Xu

SC2-05 F1447
SVC Compensation on a Real-Time Wide-Area Control for Mitigating Small-Signal Instability in Large Electric Power Systems
Jaime Quintero, Vaithianathan Venkatasubramanian

SC2-06 C1132
Fast Prediction of Loadability Margins by Constructing a Small-Signal Stability Boundary based on Neural Networks
Xueping Gu, Claudio A Canizares

SC2-07 F1548
Eigenvalue Sensitivity Analysis for Dynamic Power System
Jian Ma, Zhaoyang Dong, Pei Zhang

AP2: Apparatus 2

Session Chairperson: R.Göhler, Siemens Surge Arresters, Germany
Place: **No.5 -** Conference Hall No.5, 3rd Floor, Golden Resources Hotel
Time: Tuesday 09:00-12:30 AM Oct.24, 2006

AP2-01 F1215
Corona Phenomena of Varied High Voltage Shielding Types
Norasage Pattanadech, Siriwat Potivetkul, Pearawut Yuttagowith

AP2-02 F1309
Special Requirements on Gas-Insulated Metal-Oxide Surge Arresters
Reinhard Göhler, Lars Klingbeil

AP2-03 F1449
Power Grounding Safety: Copper Grounding Systems vs. Steel Grounding Systems
Yexu Li, Jinxi Ma, Farid Dawalibi

AP2-04 C0610
Research of LCL Resonant Inverter in Wireless Power Transfer System
Yugang Su, Chunsen Tang, Shuping Wu, Yue Sun

AP2-05 F1456
Switching Frequency Analysis of Dynamically Detuned ICPT Power Pick-ups
Ping Si, Aiguo Patrick Hu, Simon Malpas, David Budgett

AP2-06 F1458
A New Contactless Power Pick-up with Continuous Variable Inductor Control Using Magnetic Amplifier
Jr-Uei William Hsu, Aiguo Patrick Hu, Akshya Swain, Xin Dai, Yue Sun

AP2-07 F1527
A Low-Cost High Performance Tesla Transformer for Testing 115 kV Line Post Insulator
Boonyang Plangklang, Promsak Apiratkul, Paisan Boonchaim

AP2-08 C1478
A Novel on-line Monitoring Device of Stray Current in DC Rail Transit Systems
Min Jin, Longhua Mu

PL2: Power System Planning 2

Session Chairperson: Mark Lauby, Electric Power Research Institute, USA
Place: **No.6 -** Conference Hall No.6, 3rd Floor, Golden Resources Hotel
Time: Tuesday 09:00-12:30 AM Oct.24, 2006

PL2-01 F0386
Four Dimensions of a Digital Society: A Vision of Our Digital World in 2010
Mark Lauby, Marek Samotyj

PL2-02 F0901
Reliability Assessment of Composite Power System in Deregulated Environment Considering Hybrid Market Transaction Models
Thatsaphone Boongnong, Akihiko Yokoyama

PL2-03 F1047
A Novel Method for Siting and Sizing of IPP for Improved System Stability/Security
K Vaisakh, G.V. Siva Krishna Rao

PL2-04 F1201
An Effective Pricing and Financial Method to Significantly Reduce CO2 Emissions from Electricity Production – An Application of the Third Way Economic System of Unity-in-Diversity
Stephen Lee

PL2-05 C0597
A Novel Flexibility Evaluating Approach for Power System Planning under Deregulated Environment
Guoxin Xu, Chongqing Kang, Gaofeng Yang, Zhiwei Wang, Junhui Huang, Xu Wang

PL2-06 F1213
Supply Adequacy Issues in Renewable Energy and Hydro-Based Power Systems
Egill B. Hreinsson

PL2-07 F1550
Tradeoff Between Risk and Cost in Economic Dispatch Including Wind Power Penetration Using Particle Swarm Optimization
Lingfeng Wang, Chanan Singh

PL2-08 F1551
A Hybrid Method for Multi-Area Generation Expansion using Tabu-search and Dynamic Programming
Panida Jirutitijaroen, Chanan Singh

PQ2: Power Quality 2

Session Chairperson: Zhongdong Yin, North China Electric Power University, China
Place: **No.10**- Conference Hall No.10, 3rd Floor, Golden Resources Hotel
Time: Tuesday 09:00-12:30 AM Oct.24, 2006

PQ2-01 C0056
Application of Controllable Reactor in Suppressing the Voltage Fluctuation and Flicker under H∞ Control Strategy
Lixia Zhou, Zhongdong Yin, Jiru Lin, Feixiong Hu

PQ2-02 C0131
Study on Energy-saving Strategies for Dynamic Voltage Restorer
Lixin Zhi, Zhongdong Yin, Hui Ding, Junbiao Han, Feixiong Hu

PQ2-03 F0205
Effect of Low-Voltage Thyristor-Switched Capacitor Banks on Electrical Energy Consumption
Abolfazl Zebardast, Hossein Mokhtari

PQ2-04 C0304
Study on Dynamic Voltage Conditioner with One-cycle Control
Cheng Li, Xiangyang Li, Gaiping Sun, Tao Wei

PQ2-05 C0393
An Improved Modulation of the Selective Harmonic Elimination Controlling
Liang Qin, Hui Zhang, Kaipei Liu, Qisheng Liu

PQ2-06 F0239
Improvement of Nonlinear-carrier Control for High-power-factor Boost Rectifiers
K. I. Hwu, M. S. Liu, Y. H. Chen

PQ2-07 C1466
Active-reactive Power Compensation based on SCES in Distribution System
Rong Lu, Jiancheng Zhang

PN2: Panel Discussion 2: On-line Reliability Assessment and Control

Session Chairperson: Xiaomin Bai, China Electric Power Research Institute, China
Place: **IC** - International Conference, 3rd Floor, Golden Resources Hotel
Time: Tuesday 09:00-12:30 AM Oct.24, 2006

PN2-01 F1583
Detection and mitigation of cascading events
Mladen Kezunovic

PN2-02 C1584
Power System Operation Risk Assessment based on Credibility Theory
Wenchuan Wu

PN2-03 C1585
Security Region Based Probabilistic Security Assessment of Power Transmission System
Dongtao Wang

PN2-04 C1586
Online Alarm System based on Multi-agent and Cooperative Technique
Jian Ding

PN2-05 C1587
Online Dynamic Security Assessment System for Power Grid
Jianfeng Yan

PN2-06 F0118
Design of a DSA Tool for Real Time System Operations
Jianzhong Tong, Lei Wang

PR2: Protection 2

Session Chairperson: Zhiqian Bo, Areva T&D Automation, UK
Place: **BH4a** - Banquet Hall No.4a, 3rd Floor, Golden Resources Hotel
Time: Tuesday 09:00-12:30 AM Oct.24, 2006

PR2-01 C0107
Analyses and Studies on Universal Platform of Relays
Gang Li, Jun Wang, Ping Jiang, Shenming Zhang, Zhiwei Wang, Feng Deng, He Zhang, Xuhua Zheng, Qiusheng Shi, QInyi Liu

PR2-02 C0466
Wavelet Entropy Measure Definition and Its Application for Transmission Line Fault Detection and Identification （Part I: Definition and Methodology）
Zhengyou He, Xiaoqing Chen, Guoming Luo

PR2-03 F0664
An Integrated Current Differential Protection Scheme
Haigang Wang, Dingxiang Du, Zhiqian Bo, Xinzhou Dong, Zexin Zhou, Jinghan He, B R J Caunce, A Klimek

PR2-04 C0468
Wavelet Entropy Measure Definition and Its Application for Transmission Line Fault Detection and Identification （Part Ⅱ: Fault Detection in Transmission line）
Zhengyou He, Xiaoqing Chen, Ling Fu

PR2-05 C0469
Wavelet Entropy Measure Definition and Its Application for Transmission Line Fault Detection and Identification （Part III: Transmission line faults transients identification）
Zhengyou He, Xiaoqing Chen, Bin Zhang

PR2-06 C1146
Research on the On-line Coordination of Relay Protection and Integrated Manage System
Rongxiang Yuan, Zhipeng Xu

PR2-07 F1090
Improving Control Ability of Relay Protection System with Intelligent Agents
Z. Yang, Z. Lu, C. Ma, Q.H. Wu, J. Fitch

PR2-08 C1148
Research and Development of Visual Relaying Protection Setting Simulation System
Rongxiang Yuan, Hailiang Zhang

PR2-09 C1348
Application of Wavelet Entropy and Adaptive Nerve-fuzzy Inference to Fault Classification
Bin Zhang, Zhengyou He, Qingquan Qian

DS1: Distribution System 1

Session Chairperson: Jizhong Zhu, Areva T&D Co., USA
Place: **CR**, Conference Room, 5th Floor, Golden Resources Hotel
Time: Tuesday 09:00-12:30 AM Oct.24, 2006

DS1-01 C0337
Study on Medium Voltage Power-line Based Communication System Scheme for Power Distribution Automation and Development of its Terminal Equipment
Gujing Han, Xiaogong Yin, Tao Lin

DS1-02 C0697
Ethernet based Substation Communication System for Integrated Protection
Yingli Ren, Jinghan He, Z.Q Bo, Xinzhou Dong, Ben Caunce, Andrew Klimek

DS1-03 F1046
A Broker Agent for Remote Control of Distributed Power Systems
C. Ma, J.Q. Feng, Z. Yang, Q.H. Wu, J. Fitch

DS1-04 C0821
Study on Substation Control Interlocking Combined with PKI/PMI Based Access Security Method
Bin Duan, Nian Liu, Shenglong Huang

DS1-05 C0892
The Data-View Model of IEC 61850 Server
Renhui Dou, Jie Ding, Yefei Zhou

DS1-06 F1156
A Rule based Comprehensive Approach for Reconfiguration of Electrical Distribution Network
Jizhong Zhu, Xiaofu Xiong, Guanquan Shen, Qiuping Xu, Yi Xue

DS1-07 C0958
A Simulation Study on the Ethernet Communication of a Substation Automation System based on EPOCHS
Guodong Liao, Kenneth.M Hopkinson, Jun Tang, Li Ding, Xiaoru Wang

DS1-08 C1030
Study on New Type Orthogonal Arc-suppression Coil of Ground Fault Protection
Xiaoxia Wei, Yanchao Ji, Jianze Wang, Xianmin Mu

DS1-09 F1471
An Inference Technique based on Semantic Primitives for the Development of Intelligent Load Distribution Systems
Chan-Eom Park, Young-Hyuk Lee, Dae-Jung Kim, Seung-Chul Lee, Un-Chul Moon

PS2: Poster Sessions 2: SM, DC, FA, PE, DS, ST

Session Chairperson: Shanbin Pu, China Electric Power Research Institute, China
Place: **BH4b**-Banquet Hall No.4b, 3rd Floor, Golden Resources Hotel
Time: Tuesday 09:00-12:30 AM Oct.24, 2006

PS2-01 C0110
Model of Cascading Failures in Power System
Jun Yi, Xiaoxin Zhou, Yunan Xiao

PS2-02 C0305
Power System Dynamic Simulation Validation based on Similarity Theory and Analytical Hierarchy Process
Dong Han, Renmu He, Jin Ma

PS2-03 C0435
Self-Organized Criticality and Its Application in Power System Collapse Prevention
Qun Yu, Jianbo Guo

PS2-04 C0600
Power System Dynamic Stability Analysis and Stability Type Discrimination
Yongchun Su, Shijie Cheng, Jinyu Wen

PS2-05 F0676
Aspect-Oriented Modeling for Power System Stability Assessment
Jian Ma, Zhaoyang Dong

PS2-06 C0724
The Primary Frequency Regulation Dynamic Model based on Power Network
Liang Du, Junyong Liu, Xia Lei

PS2-07 C1282
Mechanism Study of Large Power Oscillation of Inter-area Lines Caused by Local Mode
Youzhong Miao, Tao Wu, Jiayang Guo, Qunju Li, Weimin Su, Yong Tang

PS2-08 C1510
Dynamic Response of TCSC and Reactance Control Method Study
Haishun Sun, Shijie Cheng, Jinyu Wen

PS2-09 F0051
Model Parameter Identification of Excitation System based on a Genetic Algorithm Techniques
Ahmed N. Abd-Alla, Shijie Cheng, Jinyu Wen, Jing Zhang

PS2-10 C0062
Research on Dynamic Load Modeling Using Back Propagation Neural Network for Electric Power System
Jin Wang, Xinran Li, Sheng Su, Xiangyang Xia

PS2-11 C0095
A New Classification and Synthesis Method for Load Dynamic Characteristics based on Field Measured Response
Shunjiang Lin, Xinran Li, Huihua Chen, Waiwen Tang

PS2-12 C0108
The Performance Analysis of Double-SVPWM in AC-DC-AC Bidirectional Converter for AC Excited Doubly Fed Generation System
Bin Wang, Kai Huang, Jingxiu Cui, Guixin Wang

PS2-13 F0231
Aggregating Induction Motors in a Power System based on their Standard Specifications
Kwok-Wai Louie

PS2-14 F0566
Enhancement of Power System Operation for Taipei MRT Network
Hui-Jen Chuang, Chao-Shun Chen, Liang- Jane Fan, Chin-Yin Ho

PS2-15 C0573
Synchronous Generator Loses Field Evolutionary Process Analysis and Correlation Part Temperature Field Computation
Lijun Liu, Weili Li, Peng Cheng

PS2-16 C0594
Transient Simulation Study of The AC/DC System Based on The New-type Converter Transformer
Longfu Luo, Yong Li, Ji Li, Jiazhu Xu, Fusheng Liu

PS2-17 C0703
Parameter Identification of Excitation Systems based on Hopfield Neural Network
Qingfen Liao, Dichen Liu, Liming Ying, Xue Cui, Yuan Li, Wentao He

PS2-18 C0738
A New Research for Internal Fault Simulation Model of Transformer
Wenbin Hao, Qunzhan Li, Yongrong Huang, Jitao Kang

PS2-19 C1537
The Effect of Hydro Turbines and Governors on Power System Low Frequency Oscillations
Xianshan Li, Chunli Zhang, Jianguo Zhu, Xiangyong Hu

PS2-20 C0043
Dynamic Performance Due to Cascading Failures based on Probabilistic Simulation
Ming Ding, Shenghu Li

PS2-21 F0229
HVDC Power System Harmonic Analysis in the Time and Frequency Domains
Kwok-Wai Louie, Paul Wilson, Randy Wachal, Alan Wang, Paul Buchanan

PS2-22 C0583
Transient Stability Boundary Visualization for Power System
Zhihong Yu, Xiaoxin Zhou, Zhongxi Wu

PS2-23 C1182
An Efficient Method of Network Simplification for Islanding Control Studies of Power Systems
Chen Shen, Xuejuan Wu, Jiayun Wu, Ying Qiao, Qiang Lu

PS2-24 C1358
Study on Grid- Based Seamless-link Hybrid Simulation System for Power Networks
Ling Li, Naiqiu Shu, Yunping Chen, Chunming Pei, Min Liu

PS2-25 C0031
The Calculation of HV Capacitor Unbalance Protection Settings for AC Filters in GeZhouBa Converter Station
Ying Long, Zhongming Sun, Delin Wang

PS2-26 C0047
A Synergetic Control Scheme for HVDC Transmission System
Xufeng Yuan, Jingyu Wen, Zhicheng Zhou, Shijie Cheng

PS2-27 C0441
The Application of GSM and GPRS Technology in Monitoring System for HVDC System Earth Pole
Wenyu Yang, Jian Liu, Jianyuan Wang, Ming Shen, Xiaofan Wang, Ze Li

PS2-28 C0644
Dynamic Model and Predictive Current Control of Voltage Source Converter Based HVDC
Xiaoyan Wen, Fei Lin, Trillion Q Zheng

PS2-29 C0769
Analysis and Control VSC-HVDC under Unbalance AC Conditions
Xiaoguang Wei, Guangfu Tang

PS2-30 C1486
Operational Mechanism and Characteristic Analysis of Novel Hybrid HVDC system
Guangkai Li, Gengyin Li, Haifeng Liang, Ming Yin, Chengyong Zhao

PS2-31 C0067
Nagative-Sequence Network Voltage Rejection for Static Var Generator
Xianming Chen, Heping Xu, Xiaohong Wang, Tong Wang

PS2-32 C0482
Coordinated Control of Multiple Damping Controllers Using Artificial Immune Network Theory
Xiaoling Jin, Jianguo Zhao, Haifeng Wang, Zhigang Du

PS2-33 C0952
Theoretical Analysis of TCSC-SVC Combination in Damping Power System Oscillations
Shiyu Liu, Qirong Jiang, Hongjun Li, Dongyu Shi

PS2-34 C1290
Effects of the Quality Factor of Reactor on the TCSC Characteristics and the Dual Impedance Solution Phenomenon
Haishun Sun, Shijie Cheng, Lin Jiang, Jianguo Zhao, Jia Ma, Jinyu Wen

PS2-35 C1417
A Novel Control Method for D-STATCOM under Unbalanced Condition
Xiangyun Fu, Jianze Wang, Yanchao Ji

PS2-36 C0129
A Novel Three-phase Buck PFC Converter based on One-cycle Control
Bing Chen, Yunxiang Xie, Fei Tang

PS2-37 C0139
A Digitally Controlled Three Phase Single Stage Rectifier Based on Matrix Converter
Zhang Dongsheng, Zhang Donglai, Zhou Xiaohu, Qin Hailiang, Wang Chao, Su Baoku

PS2-38 C1081
Identifying the Internal and the External Overvoltages of Distribution Networks based on Fisher Discriminant Method
Shibin Wang, Caixin Sun, Lian Zhang, Lin Du, Shiyou Xi

PS2-39 F0380
Optimal Heatsink Design for a Solid-state Relay Using a 3D Modeling and Simulation Software
Adrian Plesca

PS2-40 C0442
Analysis on the Active Power Filter of PI Iterative Control Strategy
Xiangyang Xia, Tieling Li

PS2-41 C0716
Design and Reliability Analysis of High Power DC Thyristor Breaker
Jialiang Wen, P. Fu, G.F. Tang, Z.Z. Liu

PS2-42 C0893
A Novel Detection and Protection Method of Rectifying Effect for HPS and HID Lamps

Zhiyun Bao, Chao Wang

PS2-43 C0977
The Research of DC Deicing Technology in Power Line
Yunqing Bai, Kongjun Zhou, Ke Zheng

PS2-44 C0986
Constant Flux and step-by-step Revolution Type PWM variable Frequency Power Supply
Jianguo Wu

PS2-45 C1174
Design of a Novel Voltage Supply Applied for Measure System of High Voltage Side in Power System
Wenchuan Ma, Xianmin Mu, Jianze Wang, Yanchao Ji

PS2-46 C1500
The Engineering Design and Optimization of Inverter Output LCR Filter in Parallel Active Power Filter
Xin Tang, Xiangjun Zeng, Chunming Tu

PS2-47 F1532
Active Power Filters with Unipolar Pulse Width Modulation to Reduce Switching Losses
Sasan Zabihi, Firuz Zare

PS2-48 C0016
Design of the Tour-inspecting System based on GPS and Embedded GIS
Hua Jin, Junhua Qu

PS2-49 C0019
Research of IP Based Multimedia Communication System Used for Combined Anti-accident Maneuver
Xiande Bu, Guanyuan Zhang, Jinghong Guo

PS2-50 C0163
Security Analysis and Defense Tactics of Electricity Market Business Management System
Lianjun Cao, Wen Wang, Wenjun Duan, Xiao Ma

PS2-51 C0728
Distributed Database System Security Model of Power Enterprise based on Intrusion Tolerance Technology
Guping Zheng, Lufeng Xu

PS2-52 F1108
Customer Information System Data Pre-processing with Feature Selection Techniques for Non-technical Losses Prediction in an Electricity Market
Anisah Hanim Nizar, Junhua Zhao, Zhaoyang Dong

PS2-53 C1118
The Study on Secure Distributed Workflow Architecture based SOA
Xiaoming Bai, Ruliang Song, Zonghan Hou

PS2-54 C1158
HPS Street Lighting Lamp Networking over Power-lines
Chao Wang, Donglai Zhang, Yuying Yao, Yi Shen, H.L. Qin, Y. Sun

PS2-55 C1426
Software for Power Grid Fault Location with Traveling-wave
Nan Chen, Xiangjun Zeng, Xin Tang, Yuanyuan Wang, Zhanglei Liu

PS2-56 C1434
Study on the Architecture of National Electric Power Supply and Demand Analysis Simulation System
Zhaoguang Hu, Xiandong Tan

PS2-57 C1475
The Modeling of Power Data Warehouse based on CIM
Xiaofeng He, Gang Wang, Jiancang Zhao, Haifeng Li

PS2-58 C1506
Research on Online Detecting Recording and Analyzing System of Substation Communication Information
Xiaofeng He, Gang Wang, Jiancang Zhao, Haifeng Li

PS2-59 F0291
Power Quality Evaluation Using Advanced Spectrum Estimation Methods
Zbigniew Leonowicz, Tadeusz Lobos

PS2-60 F0359
Classification of Multiple Power Quality Disturbances Using Support Vector Machine and One-Versus-One Approach
Whei-Min Lin, Chien-Hsien Wu, Chia-Hung Lin, Fu-Sheng Cheng

PS2-61 C0406
The Studies on Power System Harmonic Analysis based on Extending Prony Method
Zhijian Hu, Jianquang Guo, Mei Yu, Zhiwei Du, Chao Wang

PS2-62 F0445
A Wavelet Transform Method for Characterization of Voltage Variations
Haiyu Zhu, Shiun Chen

PS2-63 F0505
Dispersed Generation Systems Impact on the Voltage Sags in Distribution Systems
Cheng-Ting Hsu, Chun-Jen Fu

PS2-64 C0508
Application of Improved Mathematical Morphology Method in the Power Quality Monitoring
Ouyang Sen, Ren Zhen

PS2-65 C0796
State Space Formulation and Stability Analysis of a Doubly-fed Induction Machine with a Flywheel Energy Storage System
Gang Li, Jing Zhang, Shijie Cheng, Jinyu Wen, Yuan Pan

PS2-66 C0846
Detection of Voltage Flicker based on Mathematical Morphology Filter and Teager Energy Operator
Hong Shu, Yi Wang

PS2-67 C0849
Real-time Simulation of the Harmonic Influence on Electric Metering Using RTDS
Ling Li, Nai-qiu Shu, Chun-ming Pei, Min Liu, Chang-yu Li

PS2-68 C1269
Research into Harmonic State Estimation in Power System based on PMU and SVD
Shiying Hou, Zhixiang Xu, Houyu Lv, Zejia Jiang, Lingyi Wang

PS2-69 C1320
Voltage Sag Study for a Practical Industrial Distribution Network
Yan Li, Chengxiong Mao, Buhan Zhang, Jie Zeng

PS2-70 C1597
Median Current Moment Method for Dynamic Reconfiguration in Distribution Network
Qiang Tu, Zhizhong Guo

PS2-71 C0950
Modeling and Controller Design of Distribution Static Synchronous Compensator
Yubin Wang, Jiwen Li, Yan Lv, Xuelian Liu

PS2-72 C1113
Fuzzy Neural Network based Predictive Control for Active Power Filter
Xuhong Wang, Yigang He

PS2-73 C1596
A Study on the Protection to Prevent Overhead Insulation-covered Conductors from Lightning-caused Breakage in 10kV Distribution Networks
Weijiang Chen, Haibin Shen, Xiujuan Chen, Xianglian Yan

PS2-74 F1323
Probabilistic Approach for Passive Harmonic Filter Planning in a Power System
Gary Chang, Hung-Lu Wang, Show-Yung Chu

PS2-75 C1378
Reference Current Detection and Control for STATCOM under Unbalanced and Distorted Supply Voltage
Ruixiang Hao, Qionglin Zheng, Xiaojie You, Fei Lin

PS2-76 F1435
Optimization-based Reference Compensation Voltage Strategy for Series Active Power Filter Control
Gary Chang, Wae-Cherng Chen, Show-Yung Chu

PS2-77 C1425
Three Tuned Passive Filter to Improve Power Quality
Bo Chen, Xiangjun Zeng, Yao Xv

PS2-78 C0081
Discussion on Abnormal Rise of Displacement Voltage of Neutral Point in Compensation Electric Network and its Control Measures
Jinglu Li, Xin Wan, Chunyan Sun

PS2-79 F0381
Optimal Adjustment of Voltage Level at Power Transformers to Improve the Power Quality
Adrian Pleşca, Minel Licău

PS2-80 C0990
Study and Application of Distribution Automatic System in the Yangjiaping Power Supply Bureau
Zhihong Liu, Guozhi Mao, Huaxing Yu, Wenjun Zhou

PS2-81 C0997
Research On SOM-DBN Based Fault Early Warning System For Dispatching Automation
Min Fan, Zhihong Liu, Xieyue Huang, Weiren Shi

PS2-82 C1078
Development of Outdoor High Voltage Dynamic Reactive Power Compensation Device
Jing Yan, Li Jin

PS2-83 C1153
Study on Hybrid Automatic Voltage Control Strategy of Substation
Zhitao Wang, Guangyu He, Shengwei Mei

PS2-84 C1249
To Realize The SCL Configuration Of IEC61850 based On Relative Model
Bei Li, Lianshun Mu

PS2-85 C1363
Remote Supervisory and Control System for Wreath Net Cabinet Based on GPRS Technology
Liangshui Zhao, Aihong Wang, Jianyuan Xu

PS2-86 C0099
The Design and Realization of on-line Measuring Device of Busbar Temperature Rise for HV Switch Board
Linsuo Zeng, Maojun Wang

PS2-87 C0109
Ultra-Low Power Wireless Communication System for Cable Joints' Temperature Detecting
Chunyang Hu, Ming Liang, Huaizhi Liu, Ying Wang, Li Zhang, Jiandong Sun

PS2-88 C0151
A New System for Frequency Monitoring and Fault Analysis
Luping Jiang, Huiping Yang, Linshu Li

PS2-89 F0242
Optimal Placement and Sizing Procedure for PV Systems on Radial Distribution Systems
Angela Medina, J.C. Hernández, Francisco Jurado

PS2-90 C0402
Application of Neutral Point Earthed Method in Medium Voltage Power Grid
Yang Zhao, Wangdong Wu

PS2-91 C0408
A New Method of Live Line Measuring the Inductance Parameters of Transmission Lines based on Integral Equations
Zhijian Hu, Yunping Chen, Mei Yu, Zilong Yang

PS2-92 F0570
Temperature Effect to Distribution Feeder Load Profiles and Losses
Chia-Hung Lin, Chao-Shun Chen, Meei-Song Kang, Te-Tien Ku, Jeng-Shiung Huang, Zong-Shian Chiou, Chia-Wen Huang

PS2-93 C0588
Monitoring and Analysis of Power Supply Reliability of Low Voltage Consumers
Mingjun Yuan, Yutian Liu, Rushui Liu, Xinsheng Niu

PS2-94 C0699
An Improved Approach to Theoretical Losses Analysis of Oil Field Distribution Networks
Xiaomeng Wu, Jian Liu, Jianming Yu

PS2-95 C0749
Research on a New Extinction Coil Operation Mode for Resonant Earthed Neutral System
Hai Zhang, Yuqin Xu, Zengping Wang

PS2-96 C0966
Monte Carlo Method for Line Losses Evaluation in Transmission Network
Xiaoping Long, Wei Yan, Zhisheng Lu

11.5 Technical Sessions (Tuesday, Oct. 24 PM)

UH1: UHV Transmission

Session Chairperson: Jianchao Zheng, China EPRI, China
Place: **No.1a -** Conference Hall No.1a, 3rd Floor, Golden Resources Hotel
Time: Tuesday, 14:00-17:30 PM Oct.24, 2006

UH1-01 F0705
The Effect of Convexity of Lightning Impulse Voltage Waveforms on Accuracy of HV Measuring Systems
Pearawut Yutthagowith, Norasage Pattanadech, Vuttichai Chatpattananan, Sukumvit Phoomvuthisarn

UH1-02 C0155
Study on Sharing Earth Electrode of UHVDC
Yiying Zhu

UH1-03 F1012
Corona Audible Noise Measurements in a Small Indoor Corona Cage under HVDC Voltages
Mokwape J Lekganyane, Nelson M Ijumba, Anthony C Britten

UH1-04 C0165
Study on Xiluodu and Xiangjiaba UHVDC Earth Electrode
Mingde Cui, Lianguang Liu, Zhongming Sun

UH1-05 F1032
Converter Stations for 800 kV HVDC
Urban Åström, Victor Lescale

UH1-06 C0496
GRNN applied to study the Lightning Shielding Performance for EHV&UHV Transmission Line
Wei Deng, Lei Lan, Xudong Peng, Weidong Liu, Xi'shan Wen

UH1-07 F1472
Overhead Conductor Vibrations and Control Technologies
Jeff Wang

UH1-08 C0563
Generating the Switching Impulse with Long Time Front by Concatenated Test Transformer
Xudong Peng, Jingchao Zhang, Zhong Xu, Chengxue Zhang

UH1-09 F1511
Integrated Computer Approach to Analyze the Electromagnetic Impact of Transmission Lines
Jie Liu, Simon Fortin, Huiliang Zhao, Farid Dawalibi, Sharon Tee

UH1-10 C1110
Positive Switching Impulse Discharge Performance and Voltage Correction of 1 meter Rod-plane Air Gap
Xingliang Jiang, Jianlin Hu, Zhijin Zhang, Yunqing Bai

UH1-11 F1542
A New Approach to Calculate the Ionized Field of HVDC Transmission Lines in the Space and on the Earth Surface
Simon Fortin, Huiliang Zhao, J. Ma, Farid Dawalibi

UH1-12 F1595
Investigation of Corona and Dry Band Arcing of ADSS Fiber-Optic Cables in High Electric Field
Jordan Shikoski, George Karady, Vlatko Chingoski

SM2: System Simulation 2

Session Chairperson: Stephen Lee, Electric Power Research Institute, USA
Place: **No.1b -** Conference Hall No.1b, 3rd Floor, Golden Resources Hotel
Time: Tuesday , 14:00-17:30 PM Oct.24, 2006

SM2-01 C0296
Analysis of Composite Load Models on Load Margin of Voltage Stability
Shaohua Li, Hsiao-dong Chiang, Sheng Liu

SM2-02 C0629
Modularization Modeling of the Full-Scope Dynamic Simulation for Water-Turbo Generators
Jianguo Zhu, Xianshan Li, Xiangyong Hu

SM2-03 C0841
Geometrical Structure of Constraint Manifold in Power System Differential-Algebraic Model
Hao Wu, Ruipeng Guo, Zhenxiang Han, Deqiang Gan

SM2-04 C0844
Dynamic Modeling and Transient Stability Simulation of Asynchronized Generators in Power Systems
Xia Zhao, Jiaqi Zhou, Wenyuan Li

SM2-05 C0944
Research on the Influence of Load Characteristic on Voltage Stability
Yanping Zhang, Jianhua Zhang, Wei Huang, Han Yu

SM2-06 C1260
Researches on the Load Representation of Hunan Power Grid AC/DC System
Zhiyang Liu, Jun Wen, Minxiao Han, Ling Dong, Hui Ding

SM2-07 F1286
A Method to Refine Electricity Consumption Data from Automatic Meter Reading Systems
Fredrik Wallin, Eva Thorin, Andreas Kvarnström, Johan Kvarnström, Erik Dahlquist

SM2-08 C1362
A Trajectory Based Waveform-dividing Method for Recognizing Dynamic Performance of Power System
Jun An, Gang Mu, Hao Sheng, Ping Li, Gangui Yan

SC3: System Control 3

Session Chairperson: Olaf Ruhle, Siemens AG, Germany
Place: **No.3 -** Conference Hall No.3, 3rd Floor, Golden Resources Hotel
Time: Tuesday, 14:00-17:30 PM Oct.24, 2006

SC3-01 F0227
Dynamic Security Assessment to Protect Systems after Severe Fault Situations
Edwin Lerch, Olaf Ruhle

SC3-02 C0719
Research of Incentive Revelation Mechanism in Power System Optimal Security Control
Benguo Zou, Dapeng Wang, Lei Li, Xinsheng Niu, Hongzhi Zang, Yishu Zhao

SC3-03 F0606
Special Load Shedding Scheme to Enhance System Stability of Small Power System
Lee Eng Ling, Nyuk Min Vong

SC3-04 C0801
A New Under-Frequency Load Shedding Scheme Considering Load Frequency Characteristics
Xiaofu Xiong, Wenyuan Li

SC3-05 F1504
Power System Transient Stability Improvment Using Fuzzy Controlled STATCOM
MohammadReza Zolghadri, Alireza Ghafori, Mehdi Ehsan

SC3-06 C1006
A Nonlinear Coordinated Control Strategy for AC/DC Interconnected Power Systems
Xingyuan Li, Yanxia Xian

ST1: Substation

Session Chairperson: F. P. Dawalibi, SES Tech. Ltd, Canada
Place: **No.5 -** Conference Hall No.5, 3rd Floor, Golden Resources Hotel
Time: Tuesday , 14:00-17:30 PM Oct.24, 2006

ST1-01 F0415
Influence of Ground Potential Rise on Recloser Control Broad in Distribution Lines
Kristina Withironprasert, Natthapong Tamwong, Songsak Chusanapiputt, Sukumvit Phoomvuthisarn

ST1-02 F1073
Improved Design of Square Grounding Grids
Sherif Ghoneim, Holger Hirsch, Ahdab Elmorshedy, Rabah Amer

ST1-03 C1287
Analysis of Long Electrode Transient Parameters
Mohamed Nayel, Jie Zhao, Jinliang He, Zongyuan Cai, Qi Wang

ST1-04 F1102
Grounding Analysis of a Large Electric Power Station
Jinxi Ma, Farid P. Dawalibi

ST1-05 F1241
GPR Zone of Influence of a Typical Electric Power Network
Nina Mitskevitch, Farid Dawalibi, Jinxi Ma, Jie Liu

ST1-06 C1477
Fault Diagnosis of Substation based on Petri Nets Technology
Jingbo Huang, Longhua Mu

ST1-07 F1285
A Novel Method to Determine Earth Fault Split Factor For Grounding Grid Design of HV Substations
Seyed Mohammad Shahrtash, Nabiallah Ramezani

AP3: Transformer

Session Chairperson: Michael Ertl, Siemens AG, Germany
Place: **No.6 -** Conference Hall No.6, 3rd Floor, Golden Resources Hotel
Time: Tuesday, 14:00-17:30 PM Oct.24, 2006

AP3-01 C0292
Fault Diagnosis On Power Transformers Using Non-electric Method
Weiping Ma, Fangxiao Cheng, Ying Sun, Chungui Xie, Ming Ao

AP3-02 C0662
An Improved Power Transformer Diagnosis System for Incipient Fault based on Fuzzy Rough Set Theory

Hao Xiong, Weiguo Li, Guanghui Chang, Huimin Guo

AP3-03 F1091
Investigation of the Origin of Load-controlled Vibration of Large Power Transformers by Coupled 3D-FEM Analysis
Michael Ertl, Werner Probst

AP3-04 C0889
The Application and Research of Impedance-voltage Compare Method in the Testing of Distribution Transformer's Capacity
Huayong Liu, Shuwei Du, Yongsheng Shu, Junyi Hu, Hua Zhang

AP3-05 C0909
HV Power Equipment Running State Detection based on Image Processing and Recognition
Shutao Zhao, Baoshu Li, Xiaohui Zhu

AP3-06 F1094
A Wavelet Fuzzy Expert Technique for Classification of Power Transformer Transients
Samah El safty, Samia Gharieb, Mohamed Mansour, Abd El Latif Badr

AP3-07 C1253
Ontology-Based Maintenance Decision Support System for Electric Equipment Condition Data and Application Cooperation
Xiangrong Zu, Lianzhong Liu, Yan Xu

AP3-08 C1291
Study of Transformer's PD Sources Number Estimation and Falsity PD Sources Elimination
Gaojie Wang, Lixing Zhou, Weiguo Li

AP3-09 F1484
Electromagnetic Coupling Method for Partial Discharge Detection
K L Wong, D J Spoor

FA1: FACTS

Session Chairperson: Jianye Chen, Tsinghua University, China

Place: **No.10 -** Conference Hall No.10, 3rd Floor, Golden Resources Hotel
Time: Tuesday, 14:00-17:30 PM Oct.24, 2006

FA1-01 C0045
Study on Main Circuit Selection and Single-phase SVPWM Algorithm of SSSC
Xu Jiang, Xiangning Xiao, Yang Zhao, Aiping Ren

FA1-02 F0352
ATC Enhancement Considering Transient Stability Based on Optimal Power Flow Control by UPFC
Taisuke Masuta, Akihiko Yokoyama

FA1-03 C0150
Interaction Analysis and Coordination Control between SSSC and SVC
Jun Liu, Guangfu Tang, Xingyuan Li

FA1-04 C0210
Analysis and Implement of Thyristor-based STATCOM
Jianye Chen, Shan Song, Zanji Wang

FA1-05 F0857
Increasing Chuanyu Grid-to-Central China Mains Grid Power Transfer Capability by 550kV Fixed Series Capacitor FSC Fengjie
Lutz Kirschner, Bailu Quan, Yansheng Ding, Yan Zhou, Karl Uecker

FA1-06 C0558
Using TCSC Scheme for SSR Mitigation in a Radial Transfer Corridor
Qianjin Liu, Changchun Zhou, Lennart Ängquist, Staffan Rudin

FA1-07 F1142
MULTI-Level Current Reinjection CSC for STATCOM Application
Yonghe Liu, Lasantha Perera, Neville Watson, Jos Arrillaga

FA1-08 C0935
Real-Time Digital Simulation for a 50Mvar Cascaded Multilevel STATCOM
Zhongqi Liu, Qiang Song, Hongtao Zhang, Wenhua Liu

FA1-09 F1482
Wavelet based Capacitor Bank Adaptive Controlled Switching and its Application to RDDS Approximation for already installed Circuit Breaker
Noppadol Charbkaew, Teratam Bunyagul

FA1-10 C1155
Reliability Evaluation of STATCOM based on the k-out-of-n: G Model
Zongxiang Lu, Wenhua Liu

WAC: Wide Area Protection and Control

Session Chairperson: Yi Hu, KEMA Consulting, USA

Place: **IC -** International Conference, 3rd Floor, Golden Resources Hotel
Time: Tuesday , 14:00-17:30 PM Oct.24, 2006

WAC-01 C0083
Effect of Delayed Input on Wide Area Optimal Control and Design of Compensation
Ye Yuan, Yuanzhang Sun

WAC-02 C0119
Research of Out-of-Step Protection System based on Wide Area Measure System
Xiying Chen, Weixing Li, He Chen, Zhizhong Guo

WAC-03 F0224
Use of Special Protection Systems for Major Palo Verde Network Hub Congestion Management in the U.S. Southwest
James Hsu, Kristie Cocco, Tom Isham, Barrie Kokanos

WAC-04 C0592
A Fault Determination Algorithm For Relaying Protection System based On Wide Area Information
Wei Cong, Zhencun Pan, Jianguo Zhao, Minghui Song, Lei Ding

WAC-05 C0766
The Cooperative Modeling of Wide-area Protection Multi-agent based on Origination
Xiaoyang Tong, Xiaoru Wang, Jun Tang

WAC-06 C1056
Wams Based Flow Transferring Indentification Algorithm and Its Implementation
Huiming Xu, Tianshu Bi, Shaofeng Huang, Qixun Yang

WAC-07 F1594
Challenges in Implementing a Large-Scale PMU System
Yi Hu, Damir Novosel

WAC-08 C1375
Wide-area Protection and Control System With WAMS Based
Dengjun Yan

PR3: Protection 3

Session Chairperson: Zhiqian Bo, Areva T&D Automation, UK
Place: **BH4a -** Banquet Hall No.4a, 3rd Floor, Golden Resources Hotel
Time: Tuesday , 14:00-17:30 PM Oct.24, 2006

PR3-01 C0027
A Novel Adaptive Protective Scheme For the Single-Phase Earth Fault of the Non-Effectively Grounded Power Systems
Xiangning Lin, Xiaofei Ma, Hanli Weng, Wenjun Lu, Qing Tian

PR3-02 C0046
Study on Adaptive Protection System of Power Supply and Distribution Line
Zhongwei Li, Weiming Tong, Fengge Li, Shenghu Feng

PR3-03 C0447
A Novel Single-Phase Earth Fault Feeder Detection by Traveling Wave and Wavelets
Jingguang Huang, Xiangyong Hu, Xianshan Li, Hanmei Hu, Yanping Lv

PR3-04 F0666
Overcurrent Relay based Integrated Protection Scheme for Distribution Systems
Zhiqian Bo, Jinghan He, Xinzhou Dong, Ben Caunce, Andrew Klimek

PR3-05 C0668
Performance Evaluation of a New Directional Protection Technique for Distribution Lines
Dingding Yuan, Xinzhou Dong, Zhiqian Bo, Ben Caunce, Andrew Klimek, Shousun Chen

PR3-06 C0702
Transformer Protection based on Fault Transient Detection
Jinghan He, Zaojun Ou, Z.Q Bo, Ben Caunce, Andrew Klimek

PR3-07 C0926
Study on Fault Line Selection based on Transient and Mathematical Morphology in Resonant Grounded System
Yilong Qu, Weipu Tan, Shuan Cong, Yihan Yang

PR3-08 C0962
Fault Line Selection based on Zero Sequence Power Direction of Transient Fundamental Frequency in MV Network Grounded with Arc Extinguishing Coil
Jian Luo, Jianjun He, Hongwei Zhao, Hua Yang, Jie Zhang, Lei Liu, Rui Wang

PR3-09 C1421
Grounding Fault Protection with Sampling Value Difference in Ineffectively Earthed Power Systems
Yuanyuan Wang, Xiangjun Zeng, Yunfeng Xia, Hongjiang Ma, Yao Xu

PR3-10 F1516
High Impedance Fault Detection Using Harmonics Energy Decision Tree Algorithm
S.Mohammad Shahrtash, Mustafa Sarlak

PR3-11 C1525
Novel Automatic Synchronizer based on Dual Principles and Dual Microprocessors
Chun Huang, Yaqun Jiang, Yan Jiang

DG1: Wind Farm and DG 1

Session Chairperson: Xiaokang Xu, Siemens PTI, USA
Place: **CR -** Conference Room, 5th Floor, Golden Resources Hotel
Time: Tuesday , 14:00-17:30 PM Oct.24, 2006

DG1-01 C0105
Research of Multi-Farms Transmission of Distributed Generation based on HVDC Light
Zheran Zhang, Zhongdong Yin, Feixiong Hu

DG1-02 C0153
Control for Maximal Wind Energy Tracing in Brushless Doubly-Fed Wind Power Generation System based on Double Synchronous Coordinates
Qi Wang, Xiaohu Chen, Yanchao Ji

DG1-03 C0455
A Multi-Pole Low Speed Doubly Fed Brushless Generator for Direct Driven VSCF Wind Power System
Fengxiang Wang, Rei Jin, Zheng Wang, Fengge Zhang

DG1-04 C0572
Research of AC/DC Parallel Wind Farm Integration based on VSC-HVDC
Xiaoguang Wei, Guangfu Tang

DG1-05 F0041
Practical Application of Wind Power Models in System Analysis
Xiaokang Xu, Michael J. S. Edmonds

DG1-06 C0627
The Effect of Design Parameters on Coupling Capability of Brushless Doubly Fed Wind Power Generator
Fengge Zhang, Xiuping Wang, Jingfeng Ruan, Fengxiang Wang

DG1-07 C0698
Optimal Reactive Power Flow in Wind Generation Integrated Power System
Jiageng Qiao, Yong Min, Zongxiang Lu

DG1-08 C1230
Calculation of Maximum Injection Power of Large-scale Wind Farms Connected to Power Systems
Jun Wu, Guojie Li, Lin Cheng, Yuanzhang Sun

PS3: Poster Sessions 3: DG, MK, AP, UH

Session Chairperson: Shanbin Pu, China Electric Power Research Institute, China

Place: **BH4b** - Banquet Hall No.4b, 3rd Floor, Golden Resources Hotel

Time: Tuesday , 14:00-17:30 PM Oct.24, 2006

PS3-01 C0133
The VSCF Generator Interconnection under Stator-flux-oriented Vector Control
Weidong Liu, Xiangning Xiao, Zhongdong Yin, Yongqiang Zhu

PS3-02 C0156
Optimal Expansion Planning of Wind-Diesel Energy System
Ming Ding, Yichun Wu

PS3-03 C0225
Dynamic Behavior of Integrated Wind Turbines during Fault Condition and Impact on Relay Settings of Distribution Network Feeders
Na Cao, Haixiang Zhao, Shuanglei Feng, Huizhu Dai

PS3-04 C0424
A New SPWM Controlled Three-Switch Buck-Boost Inverter for Distributed Generation Applications
Guang-Hui Tan, Jianze Wang, Rutian Wang, Yanchao Ji

PS3-05 C0427
Cost and Performance Comparison of Cascaded Multi-level Converters for Residential Renewable Energy Conversion
Chaobo Dai, Stefan Mollov, Andrew J. Forsyth

PS3-06 C0617
The Experimental System for Variable-speed Constant-frequency Wind-power Generation Using Induction Machines
Yongqin Yan, Fei Lin, Xiaoyan Wen, Guangyan Hu, Trillion Q Zheng

PS3-07 C0798
Stator Flux Observation and Speed Estimation of a Doubly Fed Induction Generator
Liming Ying, Xue Cui, Qingfen Liao, Chunhong Tang, Liangcai Le, Zhe Chen

PS3-08 C0897
A Study of Supercapacitor Parameters and Characteristics
Yuying Yao, Donglai Zhang, Dianguo Xu

PS3-09 C1074
Design and Optimization for a Supercapacitor Application System
Nansong Zhai, Yuying Yao, Donglai Zhang, Dianguo Xu

PS3-10 F1274
Novel Active Islanding Detection Method for Distributed Power Generation System
Wen-Jung Chiang, Hurng-Liahng Jou, Jinn-Chang Wu, Ya-Tsung Feng

PS3-11 C1380
Efficiency Evaluation for Offshore Wind Farms
Zheng Li, Menghua Zhao, Zhe Chen

PS3-12 C1397
An Integrated Automatic Control System for Distributed Generation Hierarchical Islanding
Lei Ding, Zhencun Pan, Wei Cong, Jianye Pang

PS3-13 C1413
Studies on the Variable Speed Wind Turbine Control System based on PSCAD/EMTDC
Shuanglei Feng, Haixiang Zhao, Weisheng Wang

PS3-14 C1420
Comparison and Evaluation of Induction Generator Models in Wind Turbine Systems for Transient Stability of Power System
Hui Li, Zhe Chen, Li Han

PS3-15 C0049
Simulation of Large Customer Price Response Under Time-of-Use Electricity Pricing Based on Multi-Agent System
Jiahai Yuan, Jing Wang, Zhaoguang Hu

PS3-16 C0459
Analysis on Bidding Strategy of Power Provider by Game Theory
Zhenglin Yang, Yanmin Song, Rongzhang Cao, Guoqing Tang

PS3-17 C0514
Ponderings and Strategies of Power Loss Allocation - Application of United Electrical Dissection of AC Branch and Bus
Jilai Yu, Zhuo Liu

PS3-18 F0760
Regression Analysis of Electric Power Price using Meteorological Information
Hajime Miyauchi, Toshihiro Ito, Tetsuya Misawa

PS3-19 C0797
Multi-level Fuzzy Comprehensive Evaluation of Power Supply Service Quality
Xue Cui, Huijin Liu, Liming Ying, Qingfen Liao

PS3-20 C1041
A Study of Reserve Aumann-Shapley Pricing Mechanism in a Competitive Electricity Market
Ju Ge, Lizi Zhang

PS3-21 C1061
A Novel Nucleolus Allocation of Fixed Transmission Cost for Various Transaction Modes
Xiao Gao, Jianchun Peng, An Luo

PS3-22 C1252
Tracing the Flow for Transmission System based on Components
Wei Li, Hai Bao, Bo Li

PS3-23 C1303
A Node Variable Cost Analysis Method in Transmission System based on Cost Flow of Power Component
Xiaojun Wang, Hai Bao, Guangming Lu, Wei Li

PS3-24 C1461
Optimal Bidding Strategies for Power Suppliers with Transmission Congestion Taken into Account
Bing Yao, Peng Ye, Zhiyuan Cai

PS3-25 C0200
Security Checking of Long-term Contract Transaction in Northeast Regional Power Market
Wei Lin, Chengdong Li, Yunhua Du, Zhe Zhang, Zuo Liu

PS3-26 C0575
Analysis of Nash Equilibrium Considering Multi-commodity Trade in Coupled Constraint Electricity Markets
Dawei Huang, Xueshan Han, Xiangxing Meng, Zhizhong Guo

PS3-27 F0577
Evaluating the Impacts of Environmental Constraints on Ancillary Service in Integrated Energy and Reserve Market
Seon Gu Kim

PS3-28 C0737
The Research of Customer Relationship Management of Power Supply Enterprise
Yanfu Zhang, Ye Lu

PS3-29 C0762
Optimal TOU Decision Considering Demand Response Model
Na Yu, Jilai Yu

PS3-30 C0788
A Nucleolus-Based Profit Allocation Method for Determine Individual Power System Stabilizer's Contribution to System Stability
Wei Pan, Wenying Liu, Yihan Yang, Yangnan Li, Lin Cheng, Yunlong Tang

PS3-31 C0863
Model and Applications of the Curve of Power Flow Tracing
Chunyan Li, Jihui Yu

PS3-32 C0865
Global Generator and Transmission Maintenance Scheduling based On a Mixed Intelligent Optimal Algorithm In Power Market
Jun Shu, Lizi Zhang, Bing Han, Xianchao Huang

PS3-33 C1214
An Improved Particle Swarm Optimization and Its Application to Power System Transfer Capability Calculation
Changhua Zhang, Rongfu Sun, Chongxu Liu, Yue Fan, Shuanbao Niu, Yonghua Song

PS3-34 C0068
Green Cost of Electricity -Concept and Prelimenary Account System
Jing Wang, Jiahai Yuan, Zhaoguang Hu

PS3-35 C0416
A Study of Power Market Dynamics based on System Dynamics Modeling
Hongming Yang, Gaojie Wang, Lixing Zhou, Renjun Zhou

PS3-36 C0912
A Real Option based Approach for Generation Investment Decision-Making and Generation Capacity Adequacy Analysis
Yong Wang, Fushuan Wen, C.Y. Chung, Xiaochu Luo, Ruilin Xu

PS3-37 C1198
Assessment of Preventive Control and Emergency Control Coordinating Economic Benefit
Keqiu Wang, Liyong Wang, Zhen Guo, Baohui Zhang, Guochang Zhang

PS3-38 C1278
Study on Dynamic Benefits and External Economy of Pumped-storage Plant
Hong-ze Li, Hui Tan, San-gao Hu

PS3-39 C0154
Design and Implementation of State Monitoring System for Distribution Box
Weixing Li, Ming Liang, Huaizhi Liu, Wei Chang, Huijuan Li

PS3-40 C0161
Application of Data Mining Technique Based on Grey Relational Analysis in Oil-Immersed Power Apparatus Fault Diagnosis
Zheng-hong Peng, Bin Song

PS3-41 C0188
Study Of Image Recognition Used for Unattended Substation
Jun Yang, Xin Ai, Xiufang Jia, Yansong Li

PS3-42 C0433
Study on the Problem of Lightning Strike OPGW
Tiancang Du, Yao Zhang, Wenbo Xia

PS3-43 C0960
Fault Diagnosis of Power Transformer Using Kernel-Based Possibilistic Clustering
Hao Xiong, Tao Chang, Ruijing Liao, Jian Li, Caixin Sun

PS3-44 C0979
Research on the AGV Based Robot System Used in Substation Inspection
Shengfang Li, Xingzhe Hou

PS3-45 C0980
The Application of LCC Theory on the Watthour Meter Management
Kongjun Zhou, Haijun Li, Xingzhe Hou

PS3-46 C1045
Study on On-Line Monitoring of Dielectric Loss Factor for Insulation on Synthetical Relative Idea
Liwei Gong, Yuanfang Wen, Lei Hou

PS3-47 C1124
The Analysis and Handling of A 35kV Transformer Fault
Xue Huang, Shunsheng Lin

PS3-48 C1371
HV Power Equipment Diagnosis Based on Infrared Imaging Analyzing

Baoshu Li, Xiaohui Zhu, Shutao Zhao, Wendong Niu

PS3-49 C0030
Phase Control to Eliminate Inrush Current of Single-phase Transformer by Using Approximate Calculation of Residual Flux
Gaowa Wuyun, Po Li, Dichen Liu

PS3-50 C0064
Research of State Monitoring and Pre-warning System of Cable Joint in Distribution Power Grids
Huaizhi Liu, Yang Bai, Ming Liang, Huibin Chen, Xuwei Ren

PS3-51 C0169
Calculation and Analysis of Magnetic Fields and Temperature Fields for Salient Pole Synchronous Motors in the Process of Starting
Xianhao Ma, Shuye Ding, Weili Li

PS3-52 C0596
The Study of Transient Performance of Current Sensor based on Rogowski Coil and Its Application in Dynamic Simulation Experiment
Wei Li, Xianggen Yin, Deshu Chen, Zhe Zhang, Wei Chen, Yongjun Xia

PS3-53 C0607
The Reliable Design of PCB Rogowski Coil Current Transformer
Yan Zhang, Hongbin Li

PS3-54 C0670
Study on the Influencing Factors of Reignition Characteristics in 40.5kV Vacuum Circuit Breakers
Jing Yan, Zhiying Ma

PS3-55 C0828
Study Of Discharge Process And Characteristics Of Discrete Water Droplets On the RTV Hydrophobicity Surface In The Non-uniform Electric Field
Jianwu Wang, Xishan Wen, Lei Lan, Haiyan Liu

PS3-56 F0870
Integrated Gas Flow Simulation for Overall Optimization of GCB
Kazuo Nakamura, Feng Wang, Kohnosuke Sato, Mizuki Sakamoto, Hiroshi Idei, Makoto Hasegawa, Shoji Kawasaki, Hisatoshi Nakashima, Aki Higashijima

PS3-57 C0910
Study on Power Instrument Symbols Identifying based on Support Vector Machine
Shutao Zhao, Baoshu Li, Chengzong Pang, Jinsha Yuan

PS3-58 C0921
Mathematical Model of Four Typical Defects for UHF Partial Discharge in GIS
Qian Zhou, Ju Tang, Yunqing Bai, Yanbin Xie, Ming Tang

PS3-59 C0968
Research on Monitoring of Winding Deformation of Power Transformer by On-line Parameter Estimation about Leakage Inductance
Peng Li, Baohui Zhang, Zhiguo Hao, Xiaojing Hu, Yunlong Chu

PS3-60 C0978
The Concept and Technical Analysis on Cryogenic VSC-HVDC System
M. Qiu, Y.B. Lin, H.Y. Zhao, M. Liu, Y. Zhang, J. Fang, L.Z. Lin, L.Y. Xiao

PS3-61 C0991
Study on High Voltage and Large Capacity Vacuum Interrupters
Junhui Wu, Jing Yan, Hongfei Zhao, Zhiying Ma

PS3-62 C1049
20 KVA Superconductive Magnetic Energy Storage Data Acquisition System and the Controller of VSI
Huiyuan Zhao, Liye Xiao, Caihong Zhao, Zhifeng Zhang, Ming Qiu, Zhengchen Zhang

PS3-63 C1216
Development of Transformer Neutrals DC Current Blocking Device in High Power System
Yonghua Yin, Jinping Zhang, Hui Zhang, Dunwen Song, Min Xiong

PS3-64 F1270
Optimal Allocation of Micro SMES Units for Power System Stabilization by Means of Genetic Algorithm
Yuan-zhi Li, Kenichi Wada, Yasuharu Ohsawa, Jun Zhou

PS3-65 C1338
Improved Power Transformer Model for DC Biasing Analysis Considering Transient Leakage Reluctances
Lin Cao, Jie Zhao, Jinliang He

PS3-66 F1427
Power Cable Capacitance Calculation with Considering the Effect of Semi-conductive Shielding Layers
Gary Chang, Hunter Huang

PS3-67 F1539
Application of Pre-Shutdown AC Voltage Test System for XLPE Power Cable
C. Y. Lee, S. T Kwon, S. H. Chang, D.W. Kim, S.K Baek

PS3-68 C0073
The Study on the Radio Interference from ±800kV Yun Guang UHVDC Transmission Line
Baoquan Wan, Dichen Liu, Xiong Wu, Yao Lu

PS3-69 C0595
Analysis of Ecological Environment for 500kV Four Circuits Power Transmission Lines on Same Tower
Bingyi Zhang, Xiaohui Wang, Min Zhao, Yisong Zhao, Xiaoyan Wang, Guihong Feng

PS3-70 F0782
Direct Introduction of Semicon Layers in XLPE Cable Model
Majid Hasheminezhad, Mehdi Vakilian, T.R. Blackburn, B.T. Phung

PS3-71 C0803
Analysis of Common Ground Electrode Technology
Huixiang Chen, Jinliang He, Bangxin Sun, Xiaohui Dong

PS3-72 C0835
Technical and Economic Performance Analysis on Vertical Grounding Electrodes of ±800KV UHVDC
Jianwu Wang, Xishan Wen, Lei Lan, Jiayuan Li

PS3-73 F0917
Magnetic Field Measurement based on IEC PT 62110 near Power Facilities in Korea
Yunseok Lim, Kooyong Shin, Seongdoo Lee, Dongil Lee, Seungdo Baik, Jaejoon Kim, Jayoon Koo

PS3-74 C0972
Research on Electric Field of High-voltage Transmission Line Power Frequency
Luwen Xu, Yongming Li, Jihui Yu, Xingzhe Hou, Changping An

PS3-75 C1298
Research on Lightning Surge and Protection of Indoor Wiring
Wei Xu, Yu Li, Shuiming Chen, Jinliang He

PS3-76 F1543
The Sag and Fatigue Properties of STACIR/AW as a High Temperature, Low Sag Conductor
Sung-Doo Lee, Koo-Yong Shin, Hyuk-Jin Song, Dong-Il Lee, Byung-Uk Min

PS3-77 C0146
A Virtual Instrument for the Rotor Winding Inter-turn Short Circuit Fault of Generator
Shuting Wan, Luyong Lv, Qing Liu, Yan Xv, Heming Li

11.6 Technical Session (Wednesday, Oct. 25, AM)

MK3: Power Market 3

Session Chairperson: Kwok W. Cheung, Areva T&D Co., USA
Place: **No.1a -** Conference Hall No.1a, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 09:00-12:30 AM Oct. 25, 2006

MK3-01 C0684
Study of the Compensation Mechanism of Reserve Service in the Primary Power Market
Yongxiu He, Weiwei Yang, Qun He, Jiajia Wei, Wei Wang

MK3-02 F1095
Functional Design of Ancillary Service Markets under the Framework of Standard Market Design for ISO New England
Kwok Cheung, Xingwang Ma, David Sun

MK3-03 C1235
Security Coordinated Economic Dispatch for Joint Energy and Reserve Markets
Jieqing Xin, Ettore Bompard, Roberto Napoli

MK3-04 F1239
Implementation of Enhanced Load Shedding Method in Restructured Power Systems
Meysam Mashayekh, Shahram Jadid

MK3-05 C1359
Using DEA to Measure the Relative Efficiency of DSM Implementation
Jingmin Wang, Lirong Chen

MK3-06 F1347
Using Market Simulation to Recognize the Price Maker Firms
Soodabeh Soleymani, Ali Mohammad Ranjbar, Ali Reza Shirani

MK3-07 C1369
Study on Conjectural Variation based Bidding Strategy in Spinning Reserve Markets
Xudong Jia, Ming Zhou, Gengyin Li

MK3-08 F1448
Impacts of Loop Flow on Electricity Market Design
Chin Y Choo, Nirmal-Kumar C Nair, Bhujanga Chakrabarti

SM3: System Simulation 3

Session Chairperson: Zheng Zhou, Manitoba HVDC Research Centre, Canada
Place: **No.1b -** Conference Hall No.1b, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 09:00-12:30 AM Oct. 25, 2006

SM3-01 C0071
Advanced Simulation Platform of Electromagnetic Transients in Power Systems
Hongshan Zhao, Yanan Wu

SM3-02 C0087
Modeling and Simulation for Relay Protection with the CD++ Toolkit
Hongshan Zhao, Jiping Zhang, Zengqiang Mi

SM3-03 F0385
Anticipate, Simulate, Get Results and Win: Modeling at the Speed Faster than Real Time
Mark Lauby, Marek Samotyj

SM3-04 C0900
Generating Detailed Software Models Of Microprocessor-Based Relays
Tao Zhu, Xiaorong Xie, Dakang Zhu, Wenjin Cui

SM3-05 C0976
Discrimination of Inrush Current based on Dynamic Magnetizing Inductance Solved by Sinusoid Approximation of Instantaneous Signal
Guang Li, Qingquan Qian, Jian Luo, Guanglei Yu, Liting Lu

SM3-06 F0440
Transient Recovery Voltage Assessment for 138kV Breakers with the New Addition of a Wind Farm
Zheng Zhou, Xuegong Wang, Paul Wilson

SO1: System Operation

Session Chairperson: Y.Y. Hong, Chung Yuan Christian University, Taiwan, China
Place: **No.3 -** Conference Hall No.3, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 09:00-12:30 AM Oct. 25, 2006

SO1-01 C0166
The Improvement of the Small-world Network Model and Its Application Research in Bulk Power System
Jian Ding, Xiaomin Bai, Wei Zhao, Zhu Fang, Zaihua Li, Min Liu

SO1-02 C0914
Application of Multi-objective Algorithm based on Particle Swarm Optimization in Electrical Short-term Load Forecasting
Li Feng, Jianjun He, Qingyun Kong, Lin Guo

SO1-03 F0928
Reliability Assessment of Protection System for Switchyard Using Fault-Tree Analysis
Ying-Yi Hong, Lun-Hui Lee, Heng-Hsing Cheng

SO1-04 C0927
Study on the Electrical Power Fault Recorder Integrated Analysis & Application System
Yuan Li, Dichen Liu, Xinwei Du, Qingfen Liao

SO1-05 C1135
Analysis of Component's Reliability Modeling based on Real-time Operating Conditions
Jian He, Lin Cheng, Yuanzhang Sun

SO1-06 F1569
Fuzzy TSK Model for Short Term Load Forecasting of Iran National Power System
Ali Akbar Gorji, Mohammad Bagher Menhaj, Saeedeh Barghinia, Pooya Ansarimehr

SO1-07 C1379
A Case-based Reasoning System for Black-start
Yunhai Zhou, Xiangyong Hu

PE1: Power Electronics

Session Chairperson: Guangfu Tang, China Electric Power Research Institute, China
Place: **No.5 -** Conference Hall No.5, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 09:00-12:30 AM Oct. 25,, 2006

PE1-01 F0022
Design and Implementation Multilevel Inverter for 3φ Induction Motor Speed Control with RBM Chopper Technique Embedded on FPGA
Vittaya Tipsuwanporn, Khomkrit Keanthong, Anuchit Charean, Thanongchai Runghimmawan

PE1-02 C0189
Research of Main Circuit on the Series Resonance Fault Current Limiter
Huaxin Wang, Hexun Xi, Guangfu Tang

PE1-03 F0308
Applying an FPGA_based SR Control Technique to the Forward Converter to Upgrade Transient Load Response
K. I. Hwu, Y. T. Yau

PE1-04 C0783
Optimization of Output Voltage Waveform of Selective Harmonic Elimination Inverter
Wenyi Zhang, Yao Sun

PE1-05 F1185
Novel Application of PWM Switching for DC traction Circuit Breakers.
G.B. De Lange, A.M. Chol

PE1-06 C1021
Research on Restraining Low Frequency Oscillation with Flywheel Energy Storage System
Yun Zhong, Jiancheng Zhang, Gengyin Li, Zhiyuan Chen

PE1-07 F1459
Development of A Direct AC-AC Converter based on a DSPACE Platform
Hao Leo Li, Aiguo Patrick Hu, Jinfeng Gao, Xin Dai

PE1-08 C1069
Investigating a High Frequency DC/DC Converter with Soft-Switching Technology
Yugang Su, Shuping Wu, Chunsen Tang, Yue Sun

EM1: SCADA and EMS 1

Session Chairperson: Boming Zhang, Tsinghua University, China
Place: **No.6 -** Conference Hall No.6, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 09:00-12:30 AM Oct. 25,, 2006

EM1-01 C0193
A New Distributed Power Flow Algorithm between Multi-control-centers based on Asynchronous Iteration
Haibo Zhang, Boming Zhang, Hongbin Sun, Ran Ao

EM1-02 F0218
Optimal Measurement Placement for Power System State Estimation Using Hybrid Genetic Algorithm and Simulated Annealing
Thawatch Kerdchuen, Weerakorn Ongsakul

EM1-03 C0320
Iteration Algorithm of Reliability Evaluation for Medium Voltage System
Junfeng Wang, Jiaqi Zhou, Kaigui Xie, Yenren Liu

EM1-04 F0434
A Numerical Method for Finding Spanning Trees in Power System State Estimation
Madson C. Almeida, Eduardo N. Asada, Ariovaldo V. Garcia

EM1-05 C1028
Procedure-oriented State Estimation using Innovation Network Graph Based PMUs
Hong Bai, Zhizhong Guo, Lin Zhao, Yu Gao, He Chen

EM1-06 F1157
An Approach of Generation Scheduling in Energy Markets
Jizhong Zhu, Davis Hwang, Ali Sadjadpour

PQ3: Power Quality 3

Session Chairperson: A. Kazemi, Iran University of Science and Technology, Iran
Place: **No.10** - Conference Hall No.10, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 09:00-12:30 AM Oct. 25, 2006

PQ3-01 F0823
A New Control Strategy for Unified Power Quality Conditioner (UPQC) in Distribution Systems
Ahad Kazemi, Mehrdad Tarafdar Haque, Ahad Mokhtarpour

PQ3-02 C0578
Modeling and Control of a Novel Transformer-less Dynamic Voltage Restorer based on H-Bridge Cascaded Multilevel Inverter
Songcen Wang, Guangfu Tang, Kunshan Yu, Jianchao Zheng

PQ3-03 F0826
Unified Power Quality Conditioner (UPQC) Control based on Fourier Transform
Heidar ali Shayanfar, Naser Mahdavi Tabatabaei, Ahad Mokhtarpour

PQ3-04 C0752
Lagrange Modeling and a Novel Passivity-Based Control of a Single-phase inverter Applied in Neutral-Line Active Power Filter
Feng Shi, Xiaoming Zha, Yunping Chen, Jiangfeng Zou, Hao Xiong, Honglin Jiang

PQ3-05 F1177
Medium Voltage Dynamic Voltage Restorer with Neural Network Controlled Voltage Disturbance Detector
Y.H. Chung, H.J Kim, K.H. Kwon, T.B. Park, S.H. Kim, K.S. Kim, J.I. Moon

PQ3-06 C1334
Comparison of Direct and Indirect Current Control Strategy for DSTATCOM
Tianyuan Tan, Qirong Jiang, Gang Li, Yuxiang Lai

PQ3-07 F1183
Dynamic Control Strategy in Medium Voltage DVR for Mitigating Voltage Sag/Swell.
Paisan Boonchiam, Nadarajah Mithulananthan

DC1: HVDC

Session Chairperson: Xiaochen Wu, China Southern Grid, China
Place: **IC** - International Conference, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 09:00-12:30 AM Oct. 25, 2006

DC1-01 C0034
Dynamic Modeling and Transient Simulation for VSC based HVDC in Multi-Machine System
Chao Zheng, Xiaoxin Zhou, Ruomei Li

DC1-02 C0881
The Study of SSTI Between Guizhou-Guangdong II ±500 kV DC Transmission Link and Steam-Turbine-Generators Near the Rectifier Terminal
Chao Hong, Hong Rao

DC1-03 C1164
Studies of Commutation Failures in HVDC System Based on Hypersim
Lingxue Lin, Yao Zhang, Qing Zhong, Zhiwei Liao

DC1-04 F0951
Study of Coordinate Control Method …to Improve Stability on Multi –Infeed HVDC System
Su Su, Kiyotaka Ueda, Kazuyuki Tnaka, Kiyoshi Takenaka, Guohong Wu

DC1-05 C1350
H∞ Robust Control of AC/DC Power Systems based on Non-affine Nonlinear Model
Honghai Tang, Chunwen Li, Yanhong Liu

DC1-06 C1412
Analysis of Modulation Controllers of Multi-infeed HVDC for CSG in 2008
Peng Li, Xiaochen Wu, Yao Zhang, Xiaoming Jin, Chao Lu, Jingbo He

DC1-07 C1538
Preliminary Recommendations on the Suitable Shed Profile for HVDC Station Insulators with Silicone Rubber Housings
Weimin Ma, Bing Luo, Zhiyi Su, Zhengping Dang, Zhicheng Guan, Xidong Liang, Urban Åström, Dong Wu, Emily Long, Huigong Sun

DC1-08 F1048
Bird Streamer Initiated Breakdown Characteristics under HVDC Conditions
Kribashen Naidoo, Nelson Ijumba, Tony Britten

DG2: Wind Farm and DG 2

Session Chairperson: Liangzhong Yao, Areva T&D Technology Centre, UK
Place: **CR** - Conference Room, 5th Floor, Golden Resources Hotel
Time: Wednesday, 09:00-12:30 AM Oct. 25, 2006

DG2-01 F0672
Comparison of Using SVC and STATCOM for Wind Farm Integration
Lie Xu, Liangzhong Yao, Christian Sasse

DG2-02 F0722
Evaluation of Battery System for Frequency Control in Interconnected Power System with a Large Penetration of Wind Power Generation
Masashi Arita, Akihiko Yokoyama, Yasuyuki Tada

DG2-03 F0996
Optimal Operation Planning of a Photovoltaic-Cogeneration-Battery Hybrid System
Shigeru Bando, Hiroshi Asano, Tsutomu Tokumoto, Tatsuya Tsukada, Takao Ogata

DG2-04 C0813
Voltage Stability Analysis of Wind Farm Integration into Transmission Network
Yongning Chi, Yanhua Liu, Weisheng Wang, Huizhu Dai

DG2-05 F1025
Contribution of Distributed Generation to Voltage Regulation under Stochastic Attribute of Renewable Energy Resources

Surachai Chaitusaney, Akihiko Yokoyama

DG2-06 F1217
Effects of Distribution System Operations on Voltage Profiles in Distribution Grids Connected Wind Power Generation
Chun-Lien Su

DG2-07 C1333
Use of Battery Energy Storage System to Improve the Power Quality and Stability of Wind Farms
Jie Zeng, Buhan Zhang, Chengxiong Mao, Yunling Wang

DG2-08 F1570
Analysis and Support Policy Recommendation of Renewable Energy Sources in Western China
Andrej F. Gubina, Xiangyang Xu, Zhengmin Su

11.7 Technical Session (Wednesday, Oct. 25, PM)

MK4: Power Market 4

Session Chairperson: G.B.Shrestha, Nanyang Technological University, Singapore
Place: **No.1a -** Conference Hall No.1a, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 14:00-17:30 PM Oct. 25, 2006

MK4-01 F0212
27 Years of Experiences of Small Hydro Electric Power Generatimg Units made in China Installed in USA and Central America and It's Future World Market
Alexander Tseng

MK4-02 C0614
Joint Analysis of Power System Reliability and Market Price Considering the Uncertainties of Load Forecasts
Chongqing Kang, Lin Guo, Lichao Bai, Ruilin Xu, Jianjun He, Kunyao Xu

MK4-03 F0335
Optimal Bidding Strategy for Financial Transmission Right
Dan Yang, Arne Hallam, Yanni Chen, Xiaoming Wang, Fan Yang

MK4-04 C1251
An Optimal Approach for Coordinating Scheduling Day-Ahead and Real-Time Energy Market with Risks
Bo Liu, Ming Zhou, Gengyin Li

MK4-05 F1446
Operational Risk Evaluation in Competitive Electricity Market Scheduling
Arash Ehsani, Ali Mohammad Ranjbar, Mahmud Fotuhi-Firuzabad, Shahram Chehelgordi Samani

MK4-06 C1330
Research on the Theory of Financial Transmission Right and Its Application in the Electricity Market
Ming Zeng, Liangyou Wang, Zhongshu Liu, Wenyu Zhou, Xiaoliang Chen

MK4-07 F1496
A Study on the Pricing of Network Services
Jagath Fonseka, Govinda Shrestha

MK4-08 C1465
Optimal Allocation of Electromagnetic Pollution Emission Right in Power Quality Markets
Xiaodong Yang, Gengyin Li, Ming Zhou

SM4: System Simulation 4

Session Chairperson: A.J.Germond, Electric Power Systems Laboratory, Switzerland
Place: **No.1b-** Conference Hall No.1a, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 14:00-17:30 PM Aug. 25, 2006

SM4-01 C0245
Study on Parallel Algorithms for Power System Small Signal Stability based on PC Clusters
Fang Li, Jian Guo, Zhongxi Wu, Xiaoxin Zhou

SM4-02 C0746
Grid-Service Based Distributed Power Flow Calculation
Chen Shen, Ying Chen, Shaowei Huang

SM4-03 C0750
Design of a Real Time Digital Simulation System for Test of New Protection Schemes
Dingxiang Du, Haigang Wang, Zhiqian Bo, Zexin Zhou, Xinzhou Dong, Ben Caunce, Andrew Klimek

SM4-04 F1495
Application of Neural Networks to the Identification of Steady state Equivalents of External Power Systems
Anna Larsson, Alain Germond, Boming Zhang

SM4-05 C1194
A Practical Method to implement Hardware-in-Loop Testing in Parallel Electromechanical Transient Digital Simulation
Yalou Li, Xiaoxin Zhou, Zhongxi Wu

SM4-06 C1289
EMTP Modeling of Anti-Earthquake Building Stroked by Lightning
Mohamed Nayel, Naoto Nagaoka, Jinliang He, Jie Zhao, Z. Cai, Q. Wang

SM4-07 F1515
Thailand Experiences in Overvoltage Analyses and Events in Electric Power Transmission System due to Switching and Lightning Surges
Surapol Dumronggittigule, Kanchit Ngamsanroaj

SM4-08 C1294
The Study of Detailed Fossil Fuel Steam Unit Model for Long-term Power System Dynamic Simulation
Xianrong Chang, Zhenjian Guan

IN1: Information System

Session Chairperson: Yue Yuan, Hohai University, China

Place: **No.3 -** Conference Hall No.3, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 14:00-17:30 PM Oct. 25, 2006

IN1-01 C0017
Construction and Application of Multi-Degree Secrecy System based on Threshold Secret Sharing
Zhenjun Ye

IN1-02 C0626
Reliability Test of Using 802.11b Technology in Switchgear for Measurement and Control
Xiaozhe Wang, Zhiqiu Li, Yulong Huang, Rong Zeng, Liangzhong Yao, Christian Sasse, Min Han

IN1-03 C0639
Study on the Security Assessment Platform for Electric Power Secondary System
Yong Yu, Weimin Lin

IN1-04 C0700
A Three Layer Architecture Data eXchange Platform for Fujian Electric Power Company
Shicheng Hu, Han Lin, Chao Chen, Shangteng Huang, Zhencai Cai, Yong Ye, Yuanbin Xu

IN1-05 F1388
Data service in Grid-based Future Control Centers
H. F. Zhou, F. F. Wu

IN1-06 C0753
Research on DSM Based Distribution Marketing Decision Support System
Jingmin Wang, Lirong Chen, Shizhao Zhang

IN1-07 C0908
Implementation of the International Packaged Customer Service and Marketing Management Software in China
Anwei Chen, Tao Ji, Kenneth C. Cheng, Rong He, Bo Zou, Chong Liu, Li Zhao, Qing Zhang

IN1-08 C1149
The Research on 3D GIS for Power Transmission Grid Based on VR Technology
Rongxiang Yuan, Yang Xiang

IN1-09 C1399
Study on Credit Evaluation Models for Electric Power Clients and the Realization of the Software System
Ming Zeng, He Wang, Junguo Jia, Tao Wang, Jian Tang

IN1-10 C1437
Power System Fault Data Compression Using the Wavelet Transform and Vector Quantification
Yue Yuan, Xiaoming Yu, Hongji Du

VS2: Voltage Stability 2

Session Chairperson: Shen Chen, Tsinghua University, China

Place: **No.5 -** Conference Hall No.5, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 14:00-17:30 PM Oct. 25, 2006

VS2-01 C0677
Hybrid Power Control System and Its Application
Wei Hu, Qiantu Ruan, Wei Wang, Shengwei Mei, Qiang Lu

VS2-02 C1242
The Design and Implementation of HAVC System
Xiangping Ni, Wei Hu, Yingyun Sun, Guangyu He, Qiang Lu

VS2-03 C1326
Analysis of Transient Voltage Stability via Quadratic Approximation Method
Yihong Wang, Chen Shen, Shengwei Mei, Ancheng Xue

VS2-04 F1341
Robustness Evaluation of Static Voltage Stability through Structural Characteristics of Power Systems
Jun Zhou, Yasuharu Ohsawa

VS2-05 C1440
Discussion About the Corrective Control for Voltage Stability of Complex Power Systems Based on Primal-Dual Interior Point Method
Yue Yuan, Kejun Qian, Xuehong Wen

VS2-06 C1454
The Development and Field Experiment of Power Plant Subsystem of the HAVC System
Bangpeng Xie, Wei Hu, Deming Xia, Yuting Yan

VS2-07 C1474
Mechanism Research of Short-Term Large-Disturbance Voltage Stability
Yong Tang, Shiying Ma, Wuzhi Zhong

EM2: SCADA and EMS 2

Session Chairperson: Germano Lambert-Torres, Federal University at Itajuba, Brazil

Place: **No.6 -** Conference Hall No.6, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 14:00-17:30 PM Oct. 25, 2006

EM2-01 C0400
Closed Loop Identification for Multi-Area AGC Systems with Power Plant Time Delay Dynamics
Pingkang Li, Xiuxia Du, Nan Duan

EM2-02 C0567
The Study of Data Exchange Technology Among Control Center Systems
Haifeng Huang, Jinhu Zhao, Yang Cao, Tao Han, Xin Song, Yaping Li

EM2-03 F0673
Intelligent Alarm Processing
Germano Lambert-Torres, Edison Fernando Fonseca, Maurílio Pereira Coutinho, Ronaldo Rossi

EM2-04 C0618
A New Multiple Objectives Optimaization Model of Monthly Generation Scheduling
Zhifei Liang, Chongqing Kang, Hongqiang Xu, Zhidong Cao, Yuanpeng Zhang, Ming Jing

EM2-05 C0987
Development of a New Tool for Dynamic Security Assessment Using Dynamic Security Region
Yuan Zeng, Pei Zhang, Meihong Wang, Hongjie Jia, Yixin Yu, Stephen T. Lee

EM2-06 F1222
Visualization of Large-Scale Power System Operations Using Phasor Measurements
Chun-Lien Su, Bo-Yuan Jau

EM2-07 C1311
Stability-Constrained Optimal Power Flow based on a Novel Transient Stability Margin
Deming Xia, Shengwei Mei, Chen Shen, Ancheng Xue

VS1: Voltage Stability 1

Session Chairperson: C.A.Castro, University of Campinas, Brazil
Place: **No.10** - Conference Hall No.10, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 14:00-17:30 PM Oct. 25, 2006

VS1-01 C0177
A Enhanced Contingency Selection Method with respect to Multiple Contingencies for On-line Voltage Stability Assessment
Jinquan Zhao, Hsiao-Dong Chiang

VS1-02 C0236
Voltage Sensitivity Analysis in Voltage Support of the China Southern Power Grid
Qing Zhong, Yao Zhang, JIanshe Zhang, Zhigang Wu

VS1-03 F0387
Computation of Power Systems Minimum Voltage Stability Security Margins
Duvier Bedoya, Carlos Castro

VS1-04 C0564
Power Transmission Path Analysis of Voltage Stability in Shandong Power System
Liang Wang, Yutian Liu

VS1-05 C0657
Study on Secondary Voltage Control based on Multi-agent Particle Swarm Optimization Algorithm
Zhiwei Jia, Jun Liu, Xiaomei Xie

VS1-06 F0460
The Line P-Q Curve for Steady-State Voltage Stability Analysis
Ronnapa Paosateanpun, Songsak Chusanapiputt, Sukumvit Phoomvuthisarn, Sotdhipong Phichaisawat

VS1-07 C0989
Development of Power System Voltage Stability Region (PSVSR) for Static Voltage Security Assessment
Wei Wei, Hongjie Jia, Pei Zhang, Chengshan Wang, Jianzhong Wu, Stephen T. Lee

VS1-08 C1145
Analysis on Mechanisms of Mid and Longer-Term Voltage Instability
Chao Li, Rongxiang Yuan, Yuan Zheng

DC2: HVDC and FACTS

Session Chairperson: Baoliang Sheng, ABB Power Systems, HVDC, Sweden
Place: **IC** - International Conference, 3rd Floor, Golden Resources Hotel
Time: Wednesday, 14:00-17:30 PM Oct. 25, 2006

DC2-01 C0412
A Novel Method of Harmonic Suppression in the AC/DC Transmission System Based on Novel Converter Transformer
Longfu Luo, Jiazhu Xu, Ji Li, Yong Li, Fusheng Liu

DC2-02 C0561
A New Overcurrent Test Equipment for TSC Valve
Zhiyuan He, Guangfu Tang, Zhanfeng Deng, Kunpeng Zha

DC2-03 F0307
Performance Verification of the Three-Gorges - Shanghai HVDC Thyristor Modules
Giuseppe Simioli, Baoliang Sheng, Fabienner Chataignere, Weimin Ma

DC2-04 C0694
Influence of HVDC Ground Electrode Current on AC Transmission System and Its Restraining Measure
Sheng Wang, Chengxiong Mao, Jiming Lu, Guihua Mei, Dan Wang, Guodong Li

DC2-05 C0696
Research and Design of the Neutral Series Resister to Restrain the HVDC Ground Current Flowing into Transformer
Ben Niu, Rong Zeng, Bo Zhang, Jinliang He

DC2-06 F0663
Vacuum Switching Technology Improve the Switching Capacity of On-load Tap-changers in HVDC-applications
Dazhong Shen, Axel Kraemer, Dieter Dohnal

DC2-07 C0701
Research and Development of Synthectic Test Equipment for High Voltage Thyristor Valves
Jialiang Wen, G.F. Tang, Y.F. Qiu, J.L. Zhu, K.P. Zha, G.Zh. Xu

DS2: Distribution System 2

Session Chairperson: D. Rerkpreedapong, Kasetsart University, Thailand
Place: **CR** - Conference Room, 5th Floor, Golden Resources Hotel
Time: Wednesday, 14:00-17:30 PM Oct. 25, 2006

DS2-01 F1284
Reliability Assessment of Utilities Using an Enhanced Reward-Penalty Model in Performance Based Regulation System
Mahmud Fotuhi-Firuzabad, H. M. Shourkai, M. B. Kharazi, A. Salimi

DS2-02 C0124
Optimal Planning of Substation of Locating and Sizing Based on GIS and Adaptive Mutation PSO Algorithm
Zifa Liu, Jianhua Zhang

DS2-03 F1308
A Simplified Forward and Backward Sweep Approach for Distribution System Load Flow Analysis
Gary Chang, Show_Yung Chu, Hung-Lu Wang

DS2-04 C0149
Fast Reliability Indices Evaluation Algorithm for Large-scale Distribution Power Grid in China
Lin Guan, Yao Feng

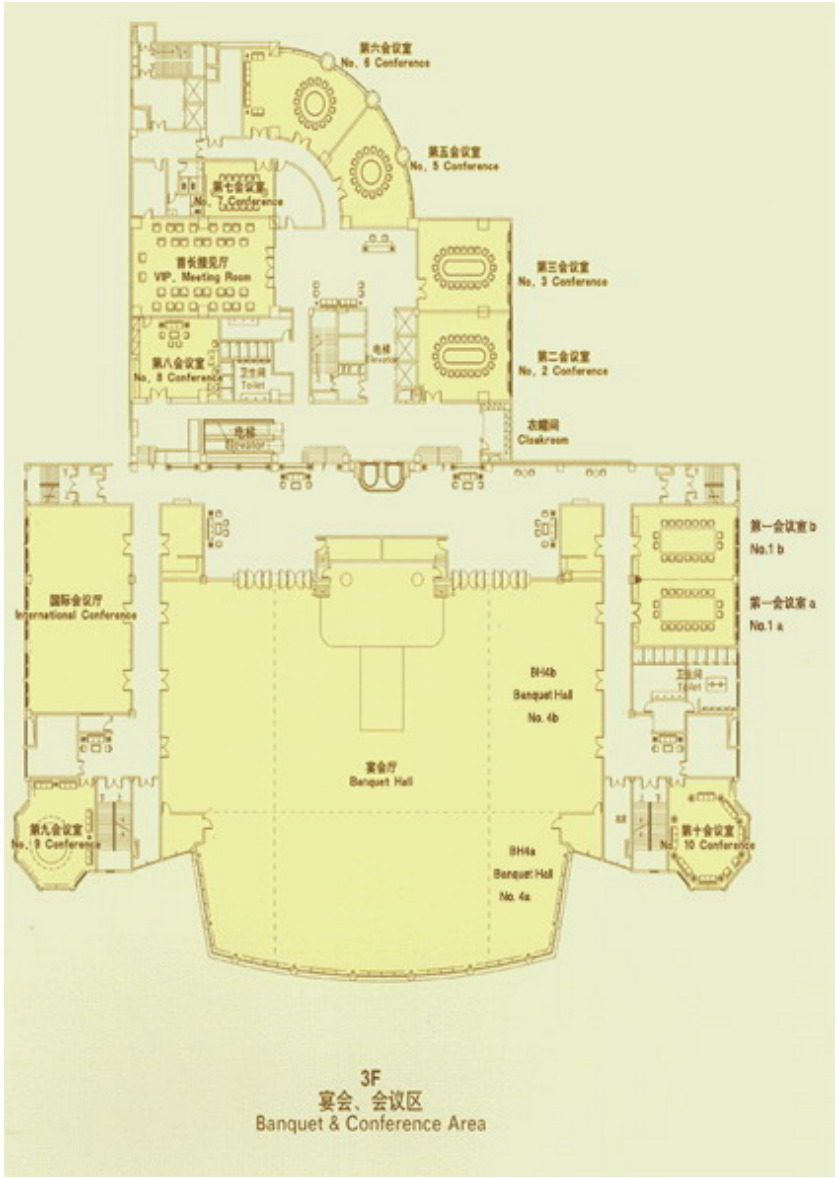
DS2-05 F1501
An Algorithm for Analyzing Reliability Indices for Radial Distribution Systems Including Distributed Generators
A. Amini, H. Shayanfar, M. Kalantar, M. Fotuhi-Firuzabad

DS2-06 C0299
Study of Intelligence-based Man-machine System Applied in Switchover Manipulation of Power Network
Taigang Ding, Guozhi Dong

DS2-07 F1505
Failure Analysis of Power Distribution System in Thailand
Wiwat Tippachon, Amnad Kwansawaitham, Nattaya Klairuang, Dulpichet Rerkpreedapong, Jamnarn Hokierti

DS2-08 F1509
Failure Mode Distribution of Transformers in Thailand
Wiwat Tippachon, Noppada Teera-achariyakul, Thepkanya Khatseng, Nattaya Klairuang, Jamnarn Hokierti

12. FLOOR PLAN OF THE CONFERENCE VENUE



安全通道 SECURITY ROUTEWAY

您在此 YOU ARE HERE

2F 楼层指示 Floorplan

安全通道 SECURITY ROUTEWAY

您在此 YOU ARE HERE

-1F 楼层指示 Floorplan