

IEEJ-EIT Joint Symposium on Advanced Technology in Power Systems

Power and Energy Engineering for Low-carbon Society

26-27 November 2009, Rama Gardens Hotel

26th November 2009

Time Grand Ballroom 1, Rama Gardens Hotel
IEEJ - EIT and University and Utility Research

08.00 - 09.00 Registration

09.00 - 09.30 Introductory Remark by Mr. Wiwat Kulwongwit, Chairman of Electrical Engineering, EIT

Opening Address by

Professor Dr. Satoshi Matsumoto, Officers, Editorial Affairs of Power and Energy Society, IEEJ

Mr. Prasong Tharachai, President of EIT

Mr. Naris Srinual, Chairman of IEEE Thailand Section

Moderator by : Dr. Channarong Banmongkol (Chulalongkorn University), Asst. Prof. Dr. Pathomthat Chiradeja (Srinakharinwirot University) and Mr. Kanchit Ngamsanroj, EGAT

Session Chairman : To be confirmed

09.30 - 09.50 Trade-off Analysis of CO₂ Versus Cost for Unit Commitment Problem by Multi-objective Optimization

D. Yamashita, K. Hasegawa, A Mohd Isa, T. Niimura, R. Yokoyama (Waseda University), M. Marmioli (Mitsubishi Electric Corp.)

09.50 - 10.10 Analysis of Power System Dynamics Using Center of Inertia Estimated by Actual Measurement Data

Takuhei Hashiguchi, Tadahiho Goda (Kyushu University), Yasunori Mitani, Masayuki Watanabe (Kyushu Institute of Technology), Osamu Saeiki (Osaka University), Masahide Hojo (The University of Tokushima), Hiroyuki Ukai (Nagoya Institute of Technology)

10.10 - 10.30 An Improved Controller Design of Distributed Energy Resources based on Synchronized Phasor Measurement and Metaheuristic Optimization

Sanchai Dechanupaprittha, Masayuki Watanabe, and Yasunori Mitani (Kyushu Institute of Technology)

10.30 - 11.00 Coffee Break

Session Chairman : To be confirmed

11.00 - 11.20 Determination of Optimal Replacement Order for Obsolete Equipments In Aged Substations Using Branch-and-Bound Method

Hideaki Tanaka (Tokyo Electric Power Company) , Hideki Magori (Tokyo Electric Power Services Company) , Kaoru Koyanagi, Ryuichi Yokoyama (Waseda University)

11.20 - 11.40 Utilization of An Asset Information Base for Advanced Power Transmission Asset Management

Tomiyasu Ichimura, Ken Kuroda, Kenichi Yamagishi, Wataru Kawai, Kazuya Sasaki (Fujitsu Limited)

11.40 - 12.00 Integrated Supply Reliability Evaluation for a Distribution Substation Considering Restoration Scenarios at Different Demand Levels

Isao Kitajima, Hideaki Tanaka, Ryuichi Yokoyama (Waseda University)

12.00 - 13.00 Lunch

Session Chairman : To be confirmed

13.10 - 13.30 Short Term Price Forecasting of New South Wales Electricity Using Wavelet Transform in Artificial Neural Network Based Model

Phatchakorn Areekul, Tomonobu Senjyu, Naomitsu Urasaki, Atsushi Yona (University of the Ryukyus)

13.30 - 13.50 Next Day Price Forecasting by a hybrid Artificial Neural Network and ARIMA Time Series Models in Deregulated Market

Phatchakorn Areekul, Tomonobu Senjyu, Naomitsu Urasaki, Atsushi Yona (University of the Ryukyus)

13.50 - 14.10 EIT-IEEE PES (Thailand) : To be confirmed

To be confirmed

Session Chairman : To be confirmed

14.10 - 14.30 Power Generating Characteristic of PV Array and Its Dependency on Direction and Tilt Angle of PV Panels

Toshiyuki Ito (Tokyo Gas Co., Ltd.), Naoki Saito (Waseda University), Tatsuya Tsukada (Tokyo Gas Co., Ltd.), Kaoru Koyanagi, Takahide Niimura, Ryuichi Yokoyama (Waseda University)

14.30 - 14.50 EIT-IEEE PES (Thailand) : To be confirmed

To be confirmed

14.50 - 15.20 Coffee Break

Session Chairman : To be confirmed

15.20 - 15.40 Measurement and Analysis of Wind Speed and Intensity of Solar Radiation for Wind Power Generation and Photovoltaic Generation

Kiyofumi Fujii, Kaoru Koyanagi, Ryuichi Yokoyama (Waseda University)

15.40 - 16.00 Analysis of Power Supply System Using Dispersed Power System in A University

Yoshihiro Kusaba, Ryuichi Yokoyama, Kaoru Koyanagi (Waseda University), Goro Fujita (Shibaura Institute of technology)

Session Chairman : To be confirmed

16.00 - 16.20 Improvement of Power System Stability by Operation and Control of NAS (Sodium Sulfur) Battery System

Kenji Hasegawa, Kaoru Koyanagi, Ryuichi Yokoyama (Waseda University)

16.20 - 16.40 EIT-IEEE PES (Thailand) : To be confirmed

To be confirmed

16.40 - 17.00 A Study on Control Method of Distributed Generators to Maximize Output of Power Generation under High Penetration Conditions

Shinsuke Tsujita, Takao Shinji (Tokyo Gas Co., Ltd.), Tsutomu Oyama, Takao Tsuji (Yokohama National University)

17.00 - 17.20 Fundamental Properties of the Electric Double Layer Capacitor and its Application to Power System
Tatsuhito Nakajima, Akiko Kumada, Hisatoshi Ikeda, Kunihiro Hidaka (University of Tokyo), Satoshi Matsumoto (Shibaura Institute of Technology), Katsuhiko Harada (Kyushu Institute of Technology), Tokihiro Umemura (Mie University)

18.30 - 20.30 Welcome Dinner : IEEJ-EIT 2009 at Tulip Room

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09.00 - 09.20 Optimal Allocation of SVCs Based on Tabu Search Against Voltage Variations Caused by Sustainable Energy Generations
Yuta Sano, Ryuichi Yokoyama, Kaoru Koyanagi (Waseda University), Kazuyuki Sato, Masao Taki, (Tokyo Metropolitan University)

09.20 - 09.40 A Study of Cooperative Tap Control Method for Voltage Profile Maintenance in Distribution Network with Distributed Generators
Takao Tsuji, Tran Nguyen, Tsutomu Oyama (Yokohama National University), Takuhei Hashiguchi, Tadahiro Goda (Kyushu University), Takao Shinji, Shinsuke Tsujita (Tokyo Gas Co., Ltd.)

09.40 - 10.00 An Advanced Fault Current Limiter of Rectifier Type in Distribution Network
Noboru Sato, Junichi Arai (Kogakuin University)

10.00 - 10.20 A study of Isolated Operation and Stability Control of a Microgrid System Supplying Different Power Quality Loads
Sho Kakuta, Guohong Wu (Tohoku Gakuin University), Chung-Neng Huang (National University of Tainan), Longyun Kang (South China University of Technology)

10.20 - 10.50 Coffee Break

Session Chairman : To be confirmed

10.50 - 11.10 Study of Microgrid with Generator and Inverter Power Sources
Koji Ikehata, Junichi Arai (Kogakuin University)

11.10 - 11.30 Electricity Cluster-Oriented Network with Renewable Energy Generation and Battery Energy Storage System
Kaoru Koyanagi, Naoki Saito, Takahide Niimura, Ryuichi Yokoyama (Waseda University), Satoshi Nagata, Mikio Fujino (VPEC), Yasuhiro Noro

11.30 - 11.50 Study of Load Frequency Control Model for Grid-independent Micro Grid
Tadatsune Sato, Kaoru Koyanagi, Ryuichi Yokoyama (Waseda University), Kunihiro Nakao (Osaka Gas Co.)

11.50 - 12.10 A Basic Study of Micro Hydraulic Power Generation System with a Regulating Pondage and Energy Storage
Akinori Izumida, Guohong Wu (Tohoku Gakuin University)

12.10 - 13.00 Lunch

Session Chairman : To be confirmed

13.10 - 13.30 Optimal Design of Energy Supply System in Microgrid in City-area Using Steam from Waste Incinerator
Shigeru Bando, Ryuta Urakawa, Eiichi Koda (The University of Tokyo)

13.30 - 13.50 EIT-IEEE PES (Thailand) : To be confirmed
To be confirmed

13.50 - 14.10 Simulation of an Inverter on ATPdraw
Ryo Tanaka, Junichi Arai (kogakuin University)

Session Chairman : To be confirmed

14.10 - 14.30 A Study on Eccentric Mass Effect for Ice-Accreted Single Conductor Transmission Line Galloping
Go Sakaguchi (ARK Information Systems), Ryuichi Yokoyama (Waseda University), Mikio Shimizu (CRIEPI)

14.30 - 14.50 Development of Arcing Horns Interrupting Fault Current for Overhead Transmission Lines
Toshiya Ohtaka, Mikimasa Iwata (Central Research Institute of Electric Power Industry), Kenichiro Nomura (Kansai Electric Power Co., Inc.), Fumito Minoura (Tokyo Electric Power Co., Inc.), Naoyuki Tsukiyama (Chubu Electric Power Co., Inc.), Kentaro Kamimura (Nippon Katan Co.,

14.50 - 15.20 Coffee Break

Session Chairman : To be confirmed

15.20 - 15.40 Movement of Vacuum Arc Cathode Spots on SS400 (Fe+C) Surface with Oxide Layer
Toru Iwao, Shinya Kamishima, Naoko Ogura, Motoshige Yumoto (Tokyo City University)

15.40 - 16.00 Research for Switching Phenomena in University
Katsuhiko Harada, Hiroaki Toda, Masahiro Kozako, Shinya Ohtsuka, Masayuki Hikita (Kyushu Institute of Technology), Hisatoshi Ikeda (The University of Tokyo)

Session Chairman : To be confirmed

16.00 - 16.20 Study on Application of Fixed Speed Synchronous Generator in Wind Farm
Junichi Arai, Satoshi Namba, Masahiro Kiwada (Kogakuin University), Masahiro Tsumenaga (Toshiba Corporation)

16.20 - 16.40 EIT-IEEE PES (Thailand) : To be confirmed
To be confirmed

16.40 - 17.00 High Efficiency Electrical Power Generation and Methane Advanced Utilization Technology for Low Carbon Emission Society
Nob. Harada (Nagaoka University of Technology)