Program

Wednesday, December 12, 2007

Opening Ceremony

Time: Wednesday, December 12, 2007, 9:20-9:30

Place: Academy Common, 2F Rooms A2 & A3

WD-S1 Advanced Power System Operation and Control

Time: Wednesday, December 12, 2007, 9:30-10:30

Place: Academy Common, 2F Rooms A2 & A3

Chair: Hiroyuki Mori, Meiji University, Kawasaki, Japan

WD-S11 (9:30-10:00) -Invited

Optimal Capacity Sizing and Balancing Control of a Microgrid

H. Asano, S. Bando, and Y. Sasaki

University of Tokyo, Tokyo, Japan

WD-S12 (10:00-10:30) -Invited

An Economic Evaluation and a Load Following Problem of Autonomous Small Networks

Y. Zoka[a)], N. Yorino [a)], A. Sugimoto [b)], and T. Yabe [a)]

a) Hiroshima University, Hiroshima, Japan b)Chugoku Electric Power Co., Hiroshima, Japan

Break(10:30-10:40)

Plenary Talk 1

Time: Wednesday, December 12, 2007, 10:40-11:40

Place: Academy Common, 2F Rooms A2 & A3

Chair: Hiroyuki Mori, Meiji University, Kawasaki, Japan

The Role of Distributed Generations and Future Energy Delivery networks in Competitive Environment

R. Yokoyama

Waseda University, Tokyo, Japan

Lunch(11:40-13:00)

Plenary Talk 2

Time: Wednesday, December 12, 2007, 13:00-14:00

Place: Academy Common, 2F Rooms A2 & A3

Chair: Hiroyuki Mori, Meiji University, Kawasaki, Japan

An Information Embedded Power System within the Context of Sustainable Energy Sources

Chika Nwankpa

Drexel University, Philadelphia, USA

Break(14:00-14:20)

WD-S2 Advanced Power System Operation and Control

Time: Wednesday, December 12, 2007, 14:20-15:20

Place: Academy Common, 2F Rooms A2 & A3

Chair: Hiroyuki Mori, Meiji University, Kawasaki, Japan

WD-S21 (14:20-14:50) -Invited

Development of Supply/Demand Control System and Power-Supply Facilities Optimization Tools for Microgrid

T. Funabashi, and T. Tanabe

Meidensha Corporation, Tokyo, Japan

WD-S22 (14:50-15:20)

An Integration Model with Data Mining for Electricity Price Forecasting

Hiroyuki Mori and Akira Awata

Meiji University, Kawasaki, Japan

Break(15:20-15:40)

WD-S3 Advanced Power System Operation and Control

Time: Wednesday, December 12, 2007, 15:40-16:40

Place: Academy Common, 2F Rooms A2 & A3

Chair: Hiroyuki Mori, Meiji University, Kawasaki, Japan

WD-S31(15:40-16:10) -Invited

Probabilistic Based Transmission Expansion Planning Considering Price, Reserve Allocation and

Reliability

P. Attaviriyanupap

Tokyo Institute of Technology, Tokyo, Japan

WD-S32 (16:10-16:40)

Application of Scatter Search with GRASP for Transmission Network Expansion Planning

Hiroyuki Mori and Kojiro Shimomugi

Meiji University, Kawasaki, Japan

Thursday, December 13, 2007

TH-S1 Advanced Power System Operation and Control

Time: Thursday, December 13, 2007, 9:20-10:50

Place: Academy Common, 2F Rooms A2 & A3

Chair: Teruhisa Kumano, Meiji University, Kawasaki, Japan

TH-S11(9:20-9:50) -Invited

Enhancement of Grid Performance by HVDC

Worawut Sae-Kok

ABB K.K, Tokyo, Japan

TH-S12 (9:50-10:20) -Invited

Application of Interline Power Flow Controller to ATC Enhancement by Optimal Power Flow Controls

Jun Zhang and Akihiko Yokoyama

University of Tokyo, Tokyo, Japan

TH-S13 (10:20-10:50) -Invited

Comparison of Fixed and Variable Speed Grid-Connected Wind Generators under Power Systems Fault Conditions

Komla A Folly and P.N. Sheetekela

University of Cape Town, Cape Town, South Africa

Break(10:50-11:10)

Plenary Talk 3

Time: Thursday, December 13, 2007, 11:10-12:10

Place: Academy Common, 2F Rooms A2 & A3

Chair: Hiroyuki Mori, Meiji University, Kawasaki, Japan

Smart Grid: the Future Distribution Network

Mohamed El-Sharkawi

University of Washington, Seattle, USA

Break(12:10-12:20)

Poster Session

Time: Thursday, December 13, 2007, 12:20-14:10

Place: Academy Common, 2F Rooms A4, A5 ,and A6

Chair: Hiroyuki Mori, Kawasaki, Meiji University

TH-P1 Evaluation of the Maximum Capacity of Intermittent Renewable Energy in a Microgrid

Y. Sasaki, S. Bando, H. Asano, and S. Tagami

University of Tokyo, Tokyo, Japan

TH-P2 Selecting Input Variables of Short-term Load Forecasting

Hiroyuki Mori and Eitaro Kurata

Meiji University, Kawasaki, Japan

TH-P3 A Method for Transient Stability Assessment Based on Critical Trajectory

Naoto Yorino, Ardyono Priyadi, and Yoshifumi Zoka

Hiroshima University, Hiroshima, Japan

TH-P4 A Meta-heuristic Method for Topology Identification in Power Systems

Hiroyuki Mori and Satoshi Saito

Meiji University, Kawasaki, Japan

TH-P5 On the Simulation of Voltage and Line Flow Limits in a Competitive Environment

Lukmanul Hakim [a)], Goran Strbac [b)], Junji Kubokawa [c)], Naoto Yorino [a)], and Yoshifumi Zoka [a)]

a)Hiroshima University, Hiroshima, Japan, b) Imperial College London, UK., c)Hiroshima Institute of Technology, Hiroshima, Japan

TH-P6 An Efficient Meta-heuristic Method for Optimizing Allocation of UPFCs

Hiroyuki Mori and Yukihiro Maeda

Meiji University, Kawasaki, Japan

TH-P7 Influence of Power Quality on Operation of Protection System

Nguyen Xuan Tung and Goro Fujita

Shibaura Institute of Technology, Tokyo, Japan

TH-P8 Probabilistic Maximum Temperature Forecasting for Short-term Load Forecasting with Gaussian Processes

Hiroyuki Mori and Daisuke Kanaoka

Meiji University, Kawasaki, Japan

TH-P9 Comparative Study of Induction Motor Models Using Singular Perturbation

S. Dahal, P. Attaviriyanupap, and Y. Kataoka

Tokyo Institute of Technology, Tokyo, Japan

TH-P10 Feature Extraction of Time Series for Electric Market Price

Hiroyuki Mori and Yasushi Umezawa

Meiji University, Kawasaki, Japan

TH-P11 Application of Newton-GMRES(m) Method to Continuation Power Flow Calculation with Linear and Nonlinear Predictors

Hiroyuki Mori and Kotaro Seki

Meiji University, Kawasaki, Japan

TH-P12 A New Modeling of Fuel Cost Characteristics of Thermal Power Plants Considering Ramp Rate of Output Power Change

Y. Shiokawa and T. Kumano,

Meiji University, Kawasaki, Japan

TH-P13 Available Transfer Capability Screening Considering Transient Stability by Support Vector Machine

H. Takahashi and T. Kumano

Meiji University, Kawasaki, Japan

TH-P14 Measurement of Electrical Characteristics of Photovoltaic Module for Accurate Operating Simulation

K.Terao and T. Kumano

Meiji University, Kawasaki, Japan

TH-P15 Multi-Objective Power System Planning by an Artificial Life-type Calculation Technique

H. Yamashita and T. Kumano

Meiji University, Kawasaki, Japan

TH-P16 Five Hours Ahead Load Forecasting System Using Reinforcement Learning

T. Omino and T. Kumano

Meiji University, Kawasaki, Japan

TH-P17 Dynamic Economic Load Dispatch by Calculus of Variation and Genetic Algorithm Considering Ramp Rate

K. Asano and T. Kumano

Meiji University, Kawasaki, Japan

TH-P18 An Efficient Multi-objective Meta-heuristic Method for Distribution Network Expansion Planning

Hiroyuki Mori and Yoshinori Yamada

Meiji University, Kawasaki, Japan

TH-P19 A Voltage Control Simulation in a Power Grid with Interconnected Solar Power Generation

Y. Okubo and T. Kumano

Meiji University, Kawasaki, Japan

TH-P 20 Effects of Collective Behavior of On-Load Tap Changers upon Power System Voltage

Y. Tokuda and T. Kumano

Meiji University, Kawasaki, Japan

TH-P 21 Evaluation of Voltage Fluctuation in Electric Power System with Wind Power Generators

N. Hosaka and T. Kumano

Meiji University, Kawasaki, Japan

TH-P 22 Optimization of Substation Transformer Noise Level based on Linear Programming

D.Yamashita, H.Tanaka, T. Niimura, and R.Yokoyama

Waseda University, Tokyo, Japan

TH-P23 Reliability Evaluation of Micro Grid including Distributed Generations based on Monte Carlo Methods

N. Saito [a)], T. Niimura[b)] and R. Yokoyama [b)]

a)Hosei University, Tokyo, Japan b)Waseda University, Tokyo, Japan

TH-P24 Optimal Allocation of Voltage Controllers based on Monte Carlo Simulation against Probabilistic Fluctuation of Wind Power Generators in Distribution Networks

Y. Hida [a)], K. Iba [a)], and R. Yokoyama [b)]

a)Meisei University, Tokyo, Japan b)Waseda University, Tokyo, Japan

TH-P25 Transmission Congestion Management by Load Curtailment and Generation Re-dispatch in a Deregulated Power System

A . Mohd Isa, T. Niimura, and R. Yokoyama

Waseda University, Tokyo, Japan

Break(14:10-14:20)

TH-S2 Advanced Power System Operation and Control

Time: Thursday, December 13, 2007, 14:20-15:50

Place: Academy Common, 2F Rooms A2 & A3

Chair: Teruhisa Kumano, Meiji University, Kawasaki, Japan

TH-S21 (14:20-14:50) -Invited

Transient Stability Constrained Optimal Power Flow using Evolutionary Programming

K. Tangpatiphan and A. Yokoyama

University of Tokyo, Tokyo, Japan

TH-S22(14:50-15:20) -Invited

Voltage Control Methods of Distribution Line under Large Penetration of Distributed Power Generation

H. Kobayashi

CRIEPI, Tokyo, Japan

TH-S23 (15:20-15:50) -Invited

Market Trend Analysis of Japan Electric Power Exchange for Bidding Strategy

M. Suzuki, T. Tsuji and T. Oyama

Yokohama National University, Yokohama, Japan

Closing Ceremony

Time: Wednesday, December 13, 2007, 15:50-16:00

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