# **Program Track 1**

- 1. Power Systems (Rooms A2 &A3)
- 1-1. Advanced Power System Operation and Control Chair: Hiroyuki Mori

1-1-1. (9:45-10:15) -Invited

## Enabler of Distributed Generation Integration - A Future Power Delivery System -

Koichi Nara

Ibaraki University, Japan

1-1-2 (10:15-10:45) -Invited

#### An Economic Evaluation for Strategic Integration of Distributed Energy Resources

N. Yorino<sup>a</sup>, Y. Zoka<sup>a</sup>, A. Sugimoto<sup>b</sup>

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

1-1-3. (10:45-11:15) -Invited

# Nonlinear Stabilizing Control for Electric Power System Based on Pursuit-Escape Particle Swarm Optimization

Atsushi Ishigame

Osaka Prefecture University, Japan

1-2. Power Generation Chair; Teruhisa Kumano

1-2-1. (14:00-14:30) -Invited

# **Excitation Control System Designs of High Response Excitation Type Superconducting Generator for Stability Improvement**

Worawut Sae-Kok

ABB, Japan

1-2-2 (14:30-15:00) -Invited

## **Demonstrative Research on Clustered PV systems**

Katsumi Akanuma, Hiroyuki Sugihara

Kandenko Co., Japan

1-2-3. (15:00-15:30)

#### **Technical Issues on Power Grid Interconnection of Wind Power Generators**

Teruhisa Kumano

Meiji University, Japan

1-3. Power Systems under New Environment 1 Chair: Hiroyuki Mori

1-3-1. (15:45-16:15) -Invited

### Distribution System Studies with Photovoltaic (PHV) Generation

Andrew Golder, Karen Miu

Drexel University, USA

1-3-2. (16:15-16:45) -Invited

# Study of Wind Generator System Introduce Wind Collection Equipment and Maximum Power Point Tracker System

Yuuya Otagiri, Kazuto Yukita, Tadashi Hosoe, Yasuyuki Goto, Katsuhiro Ichiyanagi Aichi Institute of Technology, Japan

1-3-3. (16:45-17:15) -Invited

## Survey of Forecasting Techniques for Deregulated Electricity Market Prices

T. Niimura

Trans National Computing Systems Inc., Canada

1-4. Power Systems under New Environment 2 Chair: Hiroyuki Mori

1-4-1. (17:30-18:00) -Invited

#### Roles of Advanced Information Technology for Restructured Electric Power Industry

T. Niimura<sup>a</sup>, K. Ozawa<sup>b</sup>

a) Trans National Computing Systems Inc., Canada b) Hosei University, Japan

1-4-2. (18:00-18:20)

## Feature Extraction of Meteorological Data Using Regression Tree for Wind Power Generation

Hiroyuki Mori, Akira Awata

Meiji University, Japan

1-4-3. (18:20-18:40)

Application of Gaussian Process to Wind Speed Forecasting for Wind Power Generation

#### Hiroyuki Mori, Eitaro Kurata

Meiji University, Japan

#### 1-p. Poster Session (11:30-13:00) Room A5

#### 1-p-1. Impacts of the Integration of Wind Energy on Power Systems

Mehdi Eghbal, Naoto Yorino, Yoshifumi Zoka

Hiroshima University, Japan

### 1-p-2. A Multi-agent Based Bulk Power System Restoration

Takeshi Nagata, Daisuke Kunisa

Hiroshima Institute of Technology, Japan

### 1-p-3. Internet-based Campus Electric Power Energy Monitoring System

Takeshi Nagata, Toshihisa Kai

Hiroshima Institute of Technology, Japan

# 1-p-4. Estimation Method for DG Output Using Independent Component Analysis

Masaomi Yanagida, Atsushi Ishigame

Osaka Prefecture University, Japan

### 1-p-5. Proposal of a New PSO with Pursuit and Escape Behavior

Mitsuharu Higashitani, Atsushi Ishigame

Osaka Prefecture University, Japan

#### 1-p-6. An Agent-based Simulation of Power Market

Teruhisa Kumano, Hiroyuki Mori

Meiji University, Japan

## 1-p-7. Voltage Evaluation of Power Systems with Wind Power Plants

Naoki Hosaka, Teruhisa Kumano

Meiji University, Japan

## 1-p-8 A TS-EPSO based Method for Optimal Allocation of SVC in Distribution Systems

Hiroyuki Mori, Yukihiro Maeda

Meiji University, Japan

## 1-p-9. Application of Controlled NSGA-II to Multi-objective Distribution Network Planning

Hiroyuki Mori, Yoshinori Yamada

Meiji University

### 1-p-10. Optimal Capacitor Allocation in Three-phase Unbalanced Distribution Systems

Hiroyuki Mori, Kojiro Shimomugi

Meiji University

## 1-p-11. Distribution Network Restoration Using Hierarchical Optimization and OO-PTS

Hiroyuki Mori, Atsuhiro Furuta

Meiji University

# 1-p-12. Application of Parallel Meta-heuristics to Network Reconfiguration and Capacitor Control for Loss Reduction in Distribution Systems

Hiroyuki Mori, Yubun Komatsu

Meiji University

## 1-p-13. A Bootstarp Method for Pricing Weather Derivative

Hiroyuki Mori, Daisuke Iwashita

Meiji University