



# 2016 IEEE P&ES – IEEE PES Thailand Joint Symposium

- Advanced Technology in Power Systems -

March 11, 2016



Rooms 209 and 213, 3<sup>rd</sup> Building, Faculty of Engineering, Chulalongkorn University

Room 209	
08:00 – 08:50	<b>Registration</b>
08:50 – 09:00	<b>Opening Ceremony</b> <ul style="list-style-type: none"> <li>- Dr. Yasunori Mitani, Vice president of IEEE P&amp;ES</li> <li>- Mr. Sermsakul Klaikaew, President of IEEE PES Thailand</li> </ul>
09:00 – 09:40	<b>Invited Lecture : Development of Energy Supply Systems in Rural Areas by using Folklore Approach</b> <b>Prof. Dr. Toshihisa Funabashi (Nagoya University)</b>
Session I	Chairman : K. Hongesombut (Kasetsart University)
09:40 – 10:00	<b>Enhancement of Microgrid System Stability Using Energy Storage System (PES-01)</b> *Naowarat Tephiruk, Nithiphat Teerakawanich, Siwapon Srisonphan, Komsan Hongesombut (Kasetsart University)
10:00 – 10:20	<b>Study on a Control System Design Method at Isolated Mode for Microgrids Composed of only Inverter-based DGs (TJS-16-003)</b> *Shota Igarashi, Muneaki Kurimoto, Yasuo Suzuoki, Yusuke Manabe, Takeyoshi Kato, Toshihisa Funabashi (Nagoya University)
10:20 – 10:40	<b>Coffee Break</b>
Session II	Chairman : K. Iba (Meisei University)
10:40 – 11:00	<b>Modeling of Solar PV Generation System Using ANN (PES-02)</b> *Suchakrey Nitisanon, Sarute Srisontisuk, Naebboon Hoonchareon (Chulalongkorn University)
11:00 – 11:20	<b>System Stabilization Effect of Virtual Synchronous Generator Model Based Control of PVs in Power System (TJS-16-004)</b> *Hiroshi Tsuboi, Akihiko Yokoyama (The University of Tokyo)
11:20 – 11:40	<b>Voltage Stability Analysis of Power System with Large Penetration of Photovoltaic Generation Considering the Impedance of Distribution System (TJS-16-007)</b> *Yuto Uchiyama, Haruhito Taniguchi, Takeshi Uchida, Takeshi Okuma, Jumpei Baba (The University of Tokyo), Yutaka Ota (Tokyo City University)
11:40 – 12:00	<b>State Estimation-based Voltage Control in Low-voltage Networks with Rooftop PVs (PES-03)</b> *Tu Van Dao, Surachai Chaitusaney (Chulalongkorn University)
12:00 – 13:00	<b>Lunch</b>
Session III	Chairman : T. Funabashi (Nagoya University)
13:00 – 13:20	<b>A Survey of Correlation between Power Outputs of Windmills in Various Regional Sites (TJS-16-008)</b> *Hiroki Yamaguchi, Takayasu Haraguchi, Kenji Iba (Meisei University)

13:20 – 13:40	<p><b>Prototype Development of Power Oscillation Damper for Wind Turbine with Doubly Fed Induction by Field Programmable Gate Array (PES-04)</b></p> <p>*Parut Kaewsuksai, Issarachai Ngamroo and Worawat Nakawiro (King Mongkut's Institute of Technology Ladkrabang)</p>
13:40 – 14:00	<p><b>Comparison between Active and Reactive POD control of DFIG-based Wind Power Generation (TJS-16-009)</b></p> <p>*Tomohiro Adachi, Akihiko Yokoyama (The University of Tokyo)</p>
14:00 – 14:20	<p><b>Low Voltage Ride Through Capability Enhancement of DFIG Wind Turbines with Superconducting Fault Current Limiter (PES-05)</b></p> <p>*Sillawat Romphochai, Weerawoot Kanokbannakorn and Komsan Hongesombut (Kasetsart University)</p>
14:20 – 14:40	<p><b>Wide-Area Measurement Controller Design of Optimal Regulator with Observer for Stabilizing Power System (TJS-16-005)</b></p> <p>*Shota Sakamoto (The University of Tokyo), Yutaka Ohta (Tokyo City University), Kenichi Kawabe (University of Toyama), Akihiko Yokoyama (The University of Tokyo)</p>
14:40 – 15:00	<b>Coffee Break</b>
Session IV	Chairman : W. Sae-Kok (ABB)
14:40 – 15:00	<p><b>Demand and Supply Control Considering Planned Value Based Balancing Mechanism in Small Balancing Group with a Large Integration of Renewable Energy (TJS-16-002)</b></p> <p>*Keita Sugimoto, Akihiko Yokoyama (The University of Tokyo)</p>
15:00 – 15:20	<p><b>Optimal Weekly Operation Scheduling of Pumped Storage Hydro Power Plant and Storage Battery in a Power System with a Large Penetration of Renewable Energy (TJS-16-001)</b></p> <p>*Wataru Ukita, Akihiko Yokoyama (The University of Tokyo)</p>
15:20 – 15:40	<p><b>Optimal Power Flow Calculation in Mixed AC and Multi-Terminal VSC-HVDC Systems (TJS-16-006)</b></p> <p>*Sangwon Kim, Akihiko Yokoyama (The University of Tokyo)</p>
15:40 – 16:00	<p><b>Assessment of Voltage Unbalance Impact on Residential Distribution with Single Phase EV Charging Stations (PES-06)</b></p> <p>Suphanut Satarworn and Naebboon Hoonchareon (Chulalongkorn University)</p>
16:00 – 16:20	<p><b>The Balancing Effect of "Balancer Transformer" in Single-Phase Three Line Distribution Network Systems (TJS-16-010)</b></p> <p>*Takayasu Haraguchi, Kenji Iba (Meisei University), T Takebayashi, H Kitabayashi (Fujitsu Laboratories), Y Teranishi (Fujitsu Kyushu Network Technologies)</p>
16:20 – 16:30	<b>Closing Ceremony</b>
17:30 – 19:30	<b>Banquet</b>

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Room 213	
Session V	Chairman : B. Marungsri (Suranaree University of Technology)
09:40 – 10:00	<b>Investigation on Frequency Response Analysis Measurement Method for Power Transformer Impedance (TJS-16-016)</b> *Tadashi Koshizuka (Tokyo Denki University), Hisatoshi Ikeda, Eiichi Haginomori, Yasuhiko Taniguchi (The University of Tokyo), Takeshi Shinkai (Tokyo University of Technology), A Devadiga, N Harid, S Jayaram, N. Al Sayari, B Barkat Regards Noureddine (The Petroleum Institute)
10:00 – 10:20	<b>Implementation of computer based software for oil immersed power transformer conditions monitoring via Dissolved Gas Analysis Results (PES-07)</b> *Pius Victor Chombo and Boonruang Marungsri (Suranaree University of Technology)
10:20 – 10:40	<b>Coffee Break</b>
Session VI	Chairman : S. Matsumoto (Shibaura Institute of Technology)
10:40 – 11:00	<b>Dielectric properties of Transformer Oil-Based Nanofluids (PES-08)</b> *Thanatepol Aphaisuthepporn, Peerawut Yutthagowith, Norasage Pattanadech (King Mongkut's Institute of Technology Ladkrabang)
11:00 – 11:20	<b>Study on Polymer Material Influences on the Characteristics of an Air Arc (TJS-16-011)</b> *Norrawit Tonmitr, Yuki Goto, kazuki Ganaha, Eiji Kaneko (University of the Ryukyus), Masaki Fuchikami (Togami Electric Mfg. Co., Ltd.)
11:20 – 11:40	<b>Aging Deterioration of Silicone Rubber Housing Material for Outdoor Polymer Insulator under Corona Discharge Conditions (PES-09)</b> *Ratchaphon Rawonghad and Boonruang Marungsri (Suranaree University of Technology)
11:40 – 12:00	<b>Study on Particle-Induced Corona Discharge in Insulation Systems (PES-10)</b> *Chomrong Ou, and Boonchai Tachaumnat (Chulalongkorn University)
12:00 – 13:00	<b>Lunch</b>
Session VII	Chairman : B. Techaumnat (Chulalongkorn University)
13:00 – 13:20	<b>Measurement of Prospective Transient Recovery Voltage for Breaker Terminal Fault using Low Voltage SiC Diode (TJS-16-012)</b> *Yuki Sawada, Tadashi Koshizuka (Tokyo Denki University), Hisatoshi Ikeda, Eiichi Haginomori (The University of Tokyo), Takeshi Shinkai (Tokyo University of Technology)
13:20 – 13:40	<b>Analysis about Surge Voltage Arising on Vertical Power Cable (TJS-16-013)</b> *Ryoji Oshiro, Eiji Kaneko (University of the Ryukyus)
13:40 – 14:00	<b>Air Arc Spectrum Emission Measurement (TJS-16-014)</b> *Yuki Goto, Kazuki Ganaha, Tonmitr Norrawit, Eiji Kaneko (University of the Ryukyus), Masaki Fuchikami (Togami Electric Mfg. Co., Ltd.)
14:00 – 14:20	<b>Dielectric Recovery Characteristic Deterioration of Arc-extinguishing Chamber in Air Load Switch (TJS-16-017)</b> *Kazuki Ganaha, Yuki Goto, Tonmitr Norrawit, Eiji Kaneko (University of the Ryukyus), Masaki Fuchikami (Togami Electric Mfg. Co., Ltd.)
14:20 – 14:40	<b>High Voltage Metrology for National Quality Infrastructure (PES-11)</b> *Chatchaval Kurupakorn (National Institute of Metrology)
14:40 – 15:00	<b>Coffee Break</b>
Session VIII	Chairman : E. Kaneko (University of the Ryukyus)

14:40 – 15:00	Electric Property of Semi-conductive Varnish for the Electric Field Relaxation (TJS-16-015) *Satoshi Ogiyara, Takahiro Ogiya, Hiroshi Kitagawa, Satoshi Matsumoto (Shibaura Institute of Technology)
15:00 – 15:20	Study on the Effects of Gas Pressure and Particle Size on the Liftoff of Conducting Particles (PES-12) *Monekham Vilaisien and Boonchai Techaumnat (Chulalongkorn University)
15:20 – 15:40	A Study on Waveform Characterization of Transmission Line Faults (PES-13) *Rattaphol Hongdilokkul, Channarong Banmongkol (Chulalongkorn University)

## Symposium and Banquet Venues

