Program of Sunday 19/12/2010

Opening speeches by Conference Key Sponsors

Keynote speech: “Synchronized Control, Protection, and Operation of Electric Power Systems” by Ed Schweitzer (Selinc, USA).


Effect of Large Scale Wind Power Integration And The Need For Rt Wampac. (Paper No. 305)
Fathallah Shalaby Egyptian Electricity Transmission Company (Eetc), Egypt.
Mohamed El-Haddiy Egyptian Electricity Transmission Company (Eetc), Egypt.
Soufie Basta Egyptian Electricity Holding Company (Eehc), Egypt.
Fatma Nada Egyptian Electricity Transmission Company (Eetc), Egypt.
Dalal H. Helmi Egyptian Electricity Transmission Company (Eetc), Egypt.

Assessment Of Operating Wind Energy Generation System To Supply Isolated Loads With Applications In Egypt. (Paper No. 204)
S.M.Allam Faculty of Engineering, Monefia University, Shebin El- Kom, Egypt.
A.A.EL-Zeftawy Faculty of Engineering, Monefia University, Shebin El- Kom, Egypt.
A.S.Doso Faculty of Engineering, Monefia University, Shebin El- Kom, Egypt.

A Grid-Connected Matrix Converter Based Wind Conversion System: Model and Characteristics. (Paper No. 165)
Hassan Nikkhajoei UAE

Simulation of a Proposed Maximum Power Extraction Scheme for Small Wind Turbine Systems. (Paper No. 299)
Ahmed. E. Kalas Electrical Engineering Dept., Faculty of Engineering, Port-Said University.
Medhat. H. Elfar Electrical Engineering Dept., Faculty of Engineering, Port-Said University.
Soliman. M. Sharaf Electrical Engineering Dept., Faculty of Engineering, Helwan University.

Steady-State and Transient Analyses of Wind Farm Connected to an Electric Grid with Varying Stiffness. (Paper No. 151)
Mazen Abdel Salam Electric Engineering Department, Assiut University, Assiut, Egypt.
Adel Ahmed Electric Engineering Department, Assiut University, Assiut, Egypt.
Mahmoud Mahrous Electric Engineering Department, Assiut University, Assiut, Egypt.

Planning of A Wind Power Delivery System. (Paper No. 150)
Ahmed R. Abul Wafa Electric Power and Machines Department, Ain Shams University.

Maximum Power Point Tracking Based on Sensorless Wind Speed Using Support Vector Regression. (Paper No. 264)
Ahmed G. Abo Khalil Dept. of Electrical Engineering, Assiut University, Assiut Egypt.

Jayashri Ravishankar School of Electrical Engineering & Telecommunications, University of New South Wales, Sydney, NSW 2052, Australia.
M. F. Rahman School of Electrical Engineering & Telecommunications, University of New South Wales, Sydney, NSW 2052, Australia.
Time: 10:30-12:30  Location: Lo’loaa Hall

Session B1: **Power Quality**

**Power Quality Improvement For Electrical System Feeding Metro In Egypt. (Paper No. 216)**
O. A. Monem  Faculty of Engineering, Cairo University  
A. A. Mahfouz  Faculty of Engineering, Cairo University

**A Study of Single Phase Static Energy Meter Behavior during Voltage Dips. (Paper No. 149)**
Alshaimaa Mohamed Nasr  Egyptian National Institute for Standard, Egypt.  
Doaa Khalil Ibrahim  Faculty of Engineering, Cairo University  
Soheir Fakhry  Egyptian National Institute for Standard, Egypt.  
Mohamed Mamdouh Abdel Aziz  Faculty of Engineering, Cairo University.

**Investigation of Inter-Line Dynamic Voltage Restorer in Multi Feeder Distribution System for Voltage Sag Mitigation. (Paper No. 163)**
Ahmed Hossam-Eldin  Electrical Engineering Department, Alexandria university, Egypt.  
Ahmed Elserougi  Electrical Engineering Department, Alexandria university, Egypt.  
Ahmed Massoud  Electrical and computer Engineering Dept., Qatar university, Qatar.  
Shehab Ahmed  Electrical and computer Engineering Dept., Texas A&M University at Qatar, Qatar.

A. A. Abdelsalam  Dept. of Electrical Engineering, Faculty of Engineering, University of Suez Canal, Port-Said, Port-Fouad, Egypt.  
A. A. Eldesouky  Dept. of Electrical Engineering, Faculty of Engineering, University of Suez Canal, Port-Said, Port-Fouad, Egypt.  
A. A. Sallam  Dept. of Electrical Engineering, Faculty of Engineering, University of Suez Canal, Port-Said, Port-Fouad, Egypt.

**An Assessment of a Global Performance Index for Distributed Generation Impacts on Distribution Systems. (Paper No. 310)**
Hussein. A. Attia  Electrical Power and Machine Dept. Cairo University, Egypt.  
M. El-Shibini  Electrical Power and Machine Dept. Cairo University, Egypt.  
Zeinab H. Osman  Electrical Power and Machine Dept. Cairo University, Egypt.  
Ahmed A. Moftah  Electrical Power and Machine Dept. Cairo University, Egypt.

**Tracking the Reliability indicators In Electric Power System. (Paper No. 246)**

Time: 10:30-12:30  Location: Fayrouz Hall

Session C1: **Computational Intelligence-based Systems.**

**Development of New Consolidity Theory for Systems’ Analysis and Design in Fully Fuzzy Environment. (Paper No. 100)**
Hassen Taher Dorrah  Department of Electrical Power and Machines, Faculty of Engineering, Cairo University, Giza, Egypt.  
Walaa Ibrahim M. Gabr  Egyptian Electric Holding Company; On leave to SDA Engineering Canada Inc. (Toronto, Ontario, Canada).

**Optimal Energy Control of Single Phase Induction Motors Based On Multi Objective Particle Swarm Optimization. (Paper No. 176)**
Adel M. Sharaf  Centre for Energy Studies, University of Trinidad and Tobago UTT.  
Adel A. A. El-Gammal  Centre for Energy Studies, University of Trinidad and Tobago UTT.

**Application of Augmented Lagrangian Particle Swarm Optimization in Selective Harmonic Elimination Problem (Paper No. 316)**
Mohamed Azab  Benha University-Egypt (On leave to Yanbu industrial College-Saudi Arabia).  
Hisham M. Soliman  Electrical Engineering Department, Faculty of Engineering, Cairo University, Egypt.
Synchronous Motor Design using Particle Swarm Optimization Technique. (Paper No. 287)
Ragab A. El-Sehiemy Department of electrical Engineering, University of Kafr Ellsheikh, Kafr Ellsheikh, Egypt.
M. I. Abd-Elwanis Department of electrical Engineering, University of Kafr Ellsheikh, Kafr Ellsheikh, Egypt.
A. B. kotb Department of electrical Engineering, University of Al-Azhar, Cairo, Egypt.
M. Elwany Department of electrical Engineering, University of Al-Azhar, Cairo, Egypt.

Optimal Tuning of PID Controller for AVR System using Modified Particle Swarm Optimization. (Paper No. 170)
G.Shabib Department Of Electrical Engineering, High Institute Of Energy, South Valley University, Aswan, Egypt.
Mesalam Abdel Gayed Department Of Electrical Engineering, High Institute Of Energy, South Valley University, Aswan, Egypt.
A.M.Rashwan Department Of Electrical Engineering, High Institute Of Energy, South Valley University, Aswan, Egypt.

Optimal Sizing of Solar Water Heating System Based on Genetic Algorithm for Aquaculture System. (Paper No. 244)
Doaa M. Atia Electronics Research Institute, National Research Center Building, Cairo, Egypt.
Faten H. Fahmy Electronics Research Institute, National Research Center Building, Cairo, Egypt.
Ninet M. A. El-rahman Electronics Research Institute, National Research Center Building, Cairo, Egypt.
Hassen T. Dorrah Electrical Power & Machines Dept., Cairo University, Egypt.

Speed Control of Permanent Magnet Transverse Flux Linear Motor using Artificial Neural Network Controller. (Paper No. 261)
Ahmed Y. Ellbiary Electrical Power & Machines Department, Ain Shams University, Faculty of Engineering, Cairo, Egypt.
Hany M. Hasanien Electrical Power & Machines Department, Ain Shams University, Faculty of Engineering, Cairo, Egypt.
M. A.L.Badr Electrical Power & Machines Department, Ain Shams University, Faculty of Engineering, Cairo, Egypt.

Neural Networks for Monitoring Mechanical Defects of Rotating Machines. (Paper No. 161)
Z. Derouiche Département Electronique. Faculté de Génie Electrique USTO Algeria.
M. Boukhobza Département Electronique. Faculté de Génie Electrique USTO Algeria.
B. Belmekki Département Electronique. Faculté de Génie Electrique USTO Algeria.
J.M. Rouvaen Laboratoire OAE, IEMN Université de Valenciennes France.

Spacecraft Power System Controller Based on Neural Network. (Paper No. 242)
Hanaa T. El-madany Electronics Research Institute, National Research Center Building, Cairo, Egypt.
Faten H. Fahmy Electronics Research Institute, National Research Center Building, Cairo, Egypt.
Ninet M. A. El-rahman Electronics Research Institute, National Research Center Building, Cairo, Egypt.
Hassen T. Dorrah Electrical Power & Machines Dept., Cairo University, Egypt.

Time: 10:30-12:30 Location: Library Room
Session D1: Power Electronics (I)

Simple Design Procedure for High-Power Three-Phase Inverters Operating in PWM and Six-Step Modes. (Paper No. 107)
Ahmed A. A. Hafez Electrical Engineering Department, Faculty of Engineering, Assiut University, Assiut, Egypt.

Harmonic Distortion Rate Analysis of H-Bridges Multilevel Inverter. (Paper No. 119)
Mohamed Néjib Ben Nasr ESSTT 5av . Taha Hussein BP 56 Bab Mnara-1008 Tunis.
Anis Kebir ESSTT 5av . Taha Hussein BP 56 Bab Mnara-1008 Tunis.
Faouzi Ben Ammar INSAT Centre Urbain Nord, BP 676,1080 Tunis.

Implementing a Three Phase Nine-Level Cascaded Multilevel Inverter with low Harmonics Values (Paper No. 319)
Hussein A. Konber Department of Electrical Engineering, University of Al-Azhar, Cairo, Egypt.
Osama I. EL-Hamrawy Department of Electrical Engineering, University of Al-Azhar, Cairo, Egypt.
Mahmoud EL-Bakry Department of Power Electronics, Electronics Research Institute, Cairo, Egypt.

Cascade H-Bridge Asymmetrical 11-Level Optimization. (Paper No. 206)
Mohamed Néjib Ben Nasr ESSTT 5av . Taha Hussein BP 56 Bab Mnara-1008 Tunis.
Anis Kebir ESSTT 5av . Taha Hussein BP 56 Bab Mnara-1008 Tunis.
Faouzi Ben Ammar INSAT Centre Urbain Nord, BP 676, 1080 Tunis.
New Multilevel Inverter Topology With Reduced Number Of Switches (Paper No. 236)
Rokan Ali Ahmed  Department of Electrical Engineering, University of Malaya, Kuala Lumpur, Malaysia.
S. Mekhilef  Department of Electrical Engineering, University of Malaya, Kuala Lumpur, Malaysia.
Hew Wooi Ping  Department of Electrical Engineering, University of Malaya, Kuala Lumpur, Malaysia.

Fault Tolerant Control of Four Switch Three Phase Inverter Fed Induction Motor Drive System. (Paper No. 266)
A. E. Kalas  Electrical Engineering Dept., Faculty of Engineering, Port-Said, Suez Canal University.
M. Fawzi  Electrical Engineering Dept., Faculty of Engineering, Port-Said, Suez Canal University.
Elwy E. El kholy  Electrical Engineering Dept., Faculty of Engineering, Shebin El-Kom, Monfeya University.

Open Gate Drive Fault Diagnosis of a Voltage Fed Three Phase PWM Inverter Drive System. (Paper No. 267)
A. E. Kalas  Electrical Engineering Dept. Faculty of Engineering, Port-Said, Suez Canal University.

Optimum Design for Multilevel Boost Converter. (Paper No. 275)
Mostafa Mousa  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mohamed Hilmy  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mahrous E. Ahmed  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mohamed Orabi  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Time: 14:00-16:00  Location: Zomoroda Hall
Panel Discussions I: Wind Energy Plan and Integration Issues in Egypt (Paper ID 323)
Speakers:
AbdElrahman Salah  Chairman of New and Renewable Energy Authority.
Mohamed El-Hadidy  Expert-Protection, EETC Consultant.
Fatma Nada  Consultant "A" for Studies and IPP Sector, BOO Wind Task Force Member, EETC.
Dalal Helmi  Department Manager, IPP Sector, BOO Wind Task Force Member, EETC.
Soufie Labib Basta  BOO Wind Task Force Leader, EEHC Consultant.

Time: 14:00-16:00  Location: Lo'loaa Hall
Session B2:  Power System Planning and Operation.
Contingency Analysis using Synchrophasor Measurements. (Paper No. 219)
Etham B. Makram  303 Riggs Hall, Clemson University, Clemson, SC 29631-0915.
Megan C. Vutsinas  303 Riggs Hall, Clemson University, Clemson, SC 29631-0915.
Adly A. Girgis  303 Riggs Hall, Clemson University, Clemson, SC 29631-0915.
Zheng Zhao  303 Riggs Hall, Clemson University, Clemson, SC 29631-0915.

Short Term Load Forecasting Using Evolutionary Optimized Modified Locally Weighted GMDH. (Paper No. 101)
Ehab E. Elattar  The Department of Electrical Engineering, Minufiya University, Shebin El-Kom, Egypt.
John. Y. Goulermas  The Department of Electrical Engineering and Electronics, The University of Liverpool, UK.
Q. H. Wu  The Department of Electrical Engineering and Electronics, The University of Liverpool, UK.

A New Simulink Model to Study the VFT performance when Transferring Power Between Weak and Strong AC Grids. (Paper No. 106)
Dr. Ahmed Hossam El Din  Department of Electrical Engineering, University of Alexandria, EGYPT.
Dr. Mohamed Abdullah Ashraf  Department of Electrical Engineering, University of Alexandria, EGYPT.
Eng. Mona Ibrahim  Department of Electrical Engineering, University of Alexandria, EGYPT.

A New Approach for Short-Term Load Forecasting Using Curve Fitting Prediction Optimized by Genetic Algorithms. (Paper No. 125)
M. A. Farahat  Electrical Power & Machines Department, Faculty of Engineering, Zagazig University, Egypt.
M. Talaat  Electrical Power & Machines Department, Faculty of Engineering, Zagazig University, Egypt.

Several Power Transmission Backbone Schemes. (Paper No. 182)
Yutian Liu  School of Electrical Engineering, Shandong University, Jingshi Road, Jinan, China.
Dong Yang  School of Electrical Engineering, Shandong University, Jingshi Road, Jinan, China.
Hong Chen  School of Electrical Engineering, Shandong University, Jingshi Road, Jinan, China.
Optimal Based Demand Side Management DSM Formulation. (Paper No. 314)
Hussein. A. Attia Electric Power and Machines Dept. Cairo University

Time: 14:00-16:00  Location: Fayrouz Hall

Session C2: Fuzzy Control Systems

Applications of Hyper-Fuzzy Logic in Field Oriented Control of Induction Machines. (Paper No. 179)
O. M. Salim High Institute of Technology, Benha University, Egypt.
M. A. Zohdy School of Engineering and Computer Science, Oakland University, Rochester.
H. T. Dorrah Electric Power and Machines, Faculty of Engineering, Cairo University, Egypt.
A. M. Kamel Electric Power and Machines, Faculty of Engineering, Cairo University, Egypt.

Adaptive Control of Shunt Active Power Filter Using Interval Type-2 Fuzzy Logic Controller. (Paper No. 159)
G. M. Sarhan Department of Electrical Engineering Technology, High Institute of Technology, University of Benha, Egypt.
A. A. Elkousy Department of Electrical Power Engineering, Faculty of Engineering, University of Cairo, Egypt.
A. A. Hagras Department of Physics, Cyclotron Project, Nuclear Research Centre, Egyptian Atomic Energy Authority (EAEA), Abo Zaabal, Cairo, Egypt.
Sh. M. Saad Department of Physics, Cyclotron Project, Nuclear Research Centre, Egyptian Atomic Energy Authority (EAEA), Abo Zaabal, Cairo, Egypt.

Design of PSO-Based Optimal Fuzzy PID Controllers for the Two-Coupled Distillation Columns Process. (Paper No. 148)
H. T. Dorrah Department of Electrical Power and Machines, Faculty of Engineering, Cairo University, Giza, Egypt.
A. M. El Garhy Department of Electronics, Communications and Computers, Faculty of Engineering, Helwan University, Helwan, Egypt.
M. E. El Shimy Department of Electrical Power and Machines, Faculty of Engineering, Cairo University, Giza, Egypt.

Development of New Fuzzy Logic-based Ant Colony Optimization Algorithm for Combinatorial Problems. (Paper No. 294)
Ahmed Rabie Ginidi Ginidi Automatic Control and System Engineering Group, Dept. of Electric Power and Machines Engineering, Faculty of Engineering, Cairo University, Giza, Egypt.
Ahmed M. A. M. Kamel Automatic Control and System Engineering Group, Dept. of Electric Power and Machines Engineering, Faculty of Engineering, Cairo University, Giza, Egypt.
Hassen Taher Dorrah Automatic Control and System Engineering Group, Dept. of Electric Power and Machines Engineering, Faculty of Engineering, Cairo University, Giza, Egypt.

Sameh Farid Saad Eid Automatic Control and System Engineering Group, Dept. of Electric Power and Machines Engineering, Faculty of Engineering, Cairo University, Giza, Egypt.
Ahmed Mohammed A. M. Kamel Automatic Control and System Engineering Group, Dept. of Electric Power and Machines Engineering, Faculty of Engineering, Cairo University, Giza, Egypt.
Hassen Taher Dorrah Automatic Control and System Engineering Group, Dept. of Electric Power and Machines Engineering, Faculty of Engineering, Cairo University, Giza, Egypt.

Fuzzy Logic Control of Three Phase Submerged Arc Ferrosilicon Furnace. (Paper No. 156)
G. Shabib Department of Electrical Engineering, Aswan High Institute of Energy, University of South Valley, Sahare, Aswan, Egypt.
K. Hassan Egyptian Ferro-Alloys Company Edfu, Aswan, Egypt.

Applying Neurofuzzy Computing for Safety Improvement of Nuclear Power Reactor. (Paper No. 235)
Mohamed A. Metwally Suez Canal Authority.
Ashraf Aboshosh Atomic Energy Authority.
Doaa Khalil Ibrahim Faculty of Engineering, Cairo University.
Essam EL-Din Abou EL-Zahab Faculty of Engineering, Cairo University.
New Adaptive Hysteresis Modulation Technique for Three Phase Shunt Active Power Filter. (Paper No. 118)
Mohamed R. Amer
Department of Electrical Power and Machines, Faculty of Engineering, Cairo University, Giza, Egypt.
Osama A. Mahgoub
Department of Electrical Power and Machines, Faculty of Engineering, Cairo University, Giza, Egypt.
Sherif A. Zaid
Department of Electrical Power and Machines, Faculty of Engineering, Cairo University, Giza, Egypt.

Ramptime Current-Controlled APF for Harmonic Mitigation, Power Factor Correction and Load Balancing. (Paper No. 135)
Mazen Abdel Salam
Electric Engineering Department, Assiut University, Assiut, Egypt.
Adel Ahmed
Electric Engineering Department, Assiut University, Assiut, Egypt.
Mohamed Abdel Sater
Electric Engineering Department, Assiut University, Assiut, Egypt.

Review Paper for Passive and Active Circuits of Power Factor Correction in AC-DC Converters. (Paper No. 154)
H. Z. Azazi
Electrical Engineering Department, Faculty of Engineering, Monefia University, Shebin El-Kom, Egypt.
E. E. EL Kholy
Electrical Engineering Department, Faculty of Engineering, Monefia University, Shebin El-Kom, Egypt.
S. A. Mahmoud
Electrical Engineering Department, Faculty of Engineering, Monefia University, Shebin El-Kom, Egypt.
S. S. Shokralla
Electrical Engineering Department, Faculty of Engineering, Monefia University, Shebin El-Kom, Egypt.

Improving the Performance of the Power Supply of the MGC-20 Cyclotron Harmonic Coils. (Paper No. 168)
S. G. Ramadan
High Institute of Technology, Benha University, Benha, Egypt.
G. M. Sarhan
High Institute of Technology, Benha University, Benha, Egypt.
A. A. Hagras
Nuclear Research Centre, Egyptian Atomic Energy Authority (EAEA), Abo Zaabal, Cairo, Egypt.
Sh. M. Saad
Nuclear Research Centre, Egyptian Atomic Energy Authority (EAEA), Abo Zaabal, Cairo, Egypt.

Design of Integrated High Efficiency Two Stage Point of Load DC-DC Converter. (Paper No. 269)
Mohamed Saad
APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mohamed Orabi
APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
El-Sayed Hasaneen
El-Minia University, El-Minia, Egypt.
Ashraf Lotfi
Enpirion Inc. New Jersey 08827, USA.

Microcontroller-Based Modified SEPIC Converter for Driving LED Lamp with power factor Correction. (Paper No. 270)
Mokhtar Ali
APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Amgad Keshka
APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mohamed Orabi
APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mahrous E. Ahmed
APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Abdelali El-Aorudi
Rovira i Virgili University, Tarragona, Spain.

Digital Control of Boost PFC AC-DC Converters with Predictive Control. (Paper No. 273)
H. Z Azazi
Electrical Engineering Department, Faculty of Engineering, Monefia University, Shebin El-Kom, Egypt.
E. E. EL Kholy
Electrical Engineering Department, Faculty of Engineering, Monefia University, Shebin El-Kom, Egypt.
S. A. Mahmoud
Electrical Engineering Department, Faculty of Engineering, Monefia University, Shebin El-Kom, Egypt.
S. S. Shokralla
Electrical Engineering Department, Faculty of Engineering, Monefia University, Shebin El-Kom, Egypt.
Program of Monday 20/12/2010

Time: 9:00-10:15  Location: Zomoroda Hall

Invited Papers

Tribute to Late Professor Dr. Adly Girgis (Clemson University, USA).

Tribute to Late Professor Dr. El-Sayed Azzoz (Helwan University) and Member of MEPCON Steering Committee.

Innovations in Power Systems, by Dr. Elham Makram (Clemson University, USA) (Paper ID 99).

What makes a Transmission Grid Smart, by Dr. Abdel-Aty Edris (Quanta Technology, USA) (Paper ID 322).

Time: 10:30-12:30  Location: Zomoroda Hall

Session A2: Facts

Impacts of Midpoint STATCOM and SVC on the Coordination between Generator Distance Phase Backup Protection and Generator Capability Curves. (Paper No. 158)
M. Elsamahy  Student Member, IEEE.
S.O. Faried  Senior Member, IEEE.
T. S. Sidhu  Fellow, IEEE.
G. Ramakrishna  Member, IEEE.

A. Y. Abdelaziz  Department of Electrical Power & Machines, Faculty of Engineering, Ain Shams University, Cairo, Egypt.
M. A. El-Sharkawy  Department of Electrical Power & Machines, Faculty of Engineering, Ain Shams University, Cairo, Egypt.
M. A. Attia  Department of Electrical Power & Machines, Faculty of Engineering, Ain Shams University, Cairo, Egypt.

A. Elkholy  Photovoltaic Cells Department Electronics Research Institute, Egypt.
F. H. Fahmy  Photovoltaic Cells Department Electronics Research Institute, Egypt.
A. Abu Elela  Power Electrical Department Elmenfia University, Egypt.

Newton-Raphson TCSC Model for Power Flow Solution with Different Types of Load Models. (Paper No. 250)
Abdel Moamen M. A.  Electrical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt.

Direct Modeling of UPFC in Newton Raphson Power flow Analysis Based on Current Injections. (Paper No. 281)
Salah Kamel  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mamdouh Abdel Akher  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Transmission Loss Minimization and UPFC Installation Cost using Evolutionary Computation for Improvement of Voltage Stability. (Paper No. 293)
Nor Rul Hasma Abdullah  Universiti Teknologi MARA, Shah Alam, Malaysia.
Ismail Musirin  Universiti Teknologi MARA, Shah Alam, Malaysia.
Muhammad Murtadha Othman  Universiti Teknologi MARA, Shah Alam, Malaysia.

Salah Kamel  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mamdouh Abdel Akher  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Session B3: **Wind Energy Systems: Operation and Control**

**Reactive Power Control in Future Large-Scale DFIG-Based Grid-Connected Offshore Wind Farms.** (Paper No.122)
M. EL Shimy, Electric Power and Machines Department, Faculty of Engineering, Ain Shams University, Cairo, Egypt.

**Dynamic Modeling and Control of Microturbine DG System for Autonomous Operation.** (Paper No. 172)
Mahmoud S. Kandil, Mansoura University, Department of Electrical Engineering, Mansoura, Egypt.
Magdi M. El-Saadawi, Mansoura University, Department of Electrical Engineering, Mansoura, Egypt.
Ahmed E. Hassan, Mansoura University, Department of Electrical Engineering, Mansoura, Egypt.
Khaled M. Abo-Al-Ez, Mansoura University, Department of Electrical Engineering, Mansoura, Egypt.

**Statcom For Improved Dynamic Performance Of Wind Farms In Power Grid.** (Paper No. 207)
G. Elsady, Electrical Engineering Department, Faculty of Engineering, Assiut University, Assiut, Egypt.
Y. A. Mobarak, Electrical Engineering Department, High Institute of Energy, South Valley University, Aswan, Egypt.
A-R Youssef, Faculty of Technology, High Ministry of Education, Qena, Egypt.

**Studying the Effect of Decentralized Battery Storage to Smooth the Generated Power of a Grid Integrated Wind Energy Conversion System.** (Paper No. 253)
Mohamed Ibrahim, Faculty of Engineering, Cairo University.
Amr Khairy, Faculty of Engineering, Cairo University.
Hani Hafras, Faculty of Engineering, Cairo University.
Abdellatif El Shafei, Faculty of Engineering, Cairo University.
Adel Shaltout, Faculty of Engineering, Cairo University.
Naser Abdel Rehim, Faculty of Engineering, Cairo University.

**Fuzzy Logic Control of Wind Energy Systems.** (Paper No. 311)
M. Azouz, Cairo University.
A. Shaltout, Cairo University.
M. A. El-Shafei, Cairo University.
N. Abdel Rahim, Benha University.
H. Hafras, German University in Cairo.
M. Zaher, German University in Cairo.
M. Ibrahim, Heilbronn University.

**Multi-Objective Fuzzy Baesd Procedure For Optimal Reactive Dispatch In Power Systems.** (Paper No. 312)
A. A. Abou El-Elia, Electrical Engineering Department, Faculty of Engineering, Monefia University, Egypt.
R. A. El-Sehiemy, Electrical Engineering Department, Faculty of Engineering, Kafr El Sheikh University, Egypt.
A. M. SHAHEEN, South Delta Electricity Distribution Company, Egypt.

**Innovative Renewable Energy - Load Management Technology via Controlled Weight Motion.** (Paper No. 212)
M. A. El Kady, Saudi Electricity Company Chair in Power System Reliability and Security College of Engineering, King Saud University, Riyadh, Saudi Arabia.
M. S. Al-Saud, Saudi Electricity Company Chair in Power System Reliability and Security College of Engineering, King Saud University, Riyadh, Saudi Arabia.
M. Alkhamis, Saudi Electricity Company Chair in Power System Reliability and Security College of Engineering, King Saud University, Riyadh, Saudi Arabia.

**Modeling and Control of Direct Drive Variable Speed Stand-Alone Wind Energy Conversion Systems.** (Paper No. 276)
Mohamed Hilmy, APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mahrous E. Ahmed, APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mohamed Orabi, APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mohamed El Nemer, APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Tutorial on Smart Grids: Principles and Applications (Selinc, USA).

Session D3: Measurement and Control Systems

Power Quality Disturbance Detection and Visualization Utilizing Image Processing Methods. (Paper No. 157)
Hussain Shareef Faculty of Engineering and Build Environment, Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia.
Azah Mohamed Faculty of Engineering and Build Environment, Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia.

Nhat-Hai NGUYEN Grenoble Institute of Technology, Grenoble, France.
Quoc-Tuan TRAN Grenoble Institute of Technology, Grenoble, France.
Jean-Michel LEGER Grenoble Institute of Technology, Grenoble, France.
Tan-Phu VUONG Grenoble Institute of Technology, Grenoble, France.

Practical Issues of Power Line Communication for Automatic Meter Reading Systems. (Paper No. 252)
Yasser Fathi Faculty of Engineering, Monefia University, Shebin El Kom
Tamer A. Kawady Faculty of Engineering, Monefia University, Shebin El Kom
Ahmed Husein Faculty of Engineering, Monefia University, Shebin El Kom
Mohamed El Geziry Faculty of Engineering, Monefia University, Shebin El Kom

Performance Evaluation of VFT during Healthy and Faulted Conditions. (Paper No. 247)
E. T. Raslan Department of Electrical Engineering, Faculty of Engineering, Alexandria University, Egypt.
A. S. Abdel Khalik Department of Electrical Engineering, Faculty of Engineering, Alexandria University, Egypt.
M. A. Abdulla Department of Electrical Engineering, Faculty of Engineering, Alexandria University, Egypt.
M. Z. Mustafa Department of Electrical Engineering, Faculty of Engineering, Alexandria University, Egypt.

Comparative study between TCSC and PSS in damping electro-mechanical oscillations. (Paper No. 298)
Amr Abd Elnaeem Faculty of Engineering, Cairo University, Cairo, Egypt.
Hossam Kamal Mohammed Faculty of Engineering, Cairo University, Cairo, Egypt.
Hussain Magdy Zeineldin Faculty of Engineering, Cairo University, Cairo, Egypt.

Mohamed A. Ali Department of Electrical Engineering, University of Benha, Cairo, Egypt.
Wael R. Anis Department of Electrical Engineering, University of Zagazig, Cairo, Egypt.
Wagdy M. Mansour Department of Electrical Engineering, University of Benha, Cairo, Egypt.
Fahmy M. Bendary Department of Electrical Engineering, University of Benha, Cairo, Egypt.

Panel Discussions II: Electricity and Environment

Speakers:
Roshdy Radwan Department of Electrical Engineering, Cairo University.
Mazen Abdel Salam Department of Electrical Engineering, Assiut University.
Hussein Anis Department of Electrical Engineering, Cairo University.

Demand Side Management Program Evaluation Based on Industrial and Commercial Field Data. (Paper No. 105)
M. M. Eissa King Abdul-Aziz University, Projects Department, Jeddah, KSA..
DS Reconfiguration for Loss Minimization Using GA and Load Flow Solution. (Paper No. 117)
Eng. Mohamed Magdy Farou Engineer of Electric Power in Arab Consulting Company, Department of electric power engineering, University of Cairo.
Dr. Hossam Kamal Youssef Engineer of Electric Power in Arab Consulting Company, Department of electric power engineering, University of Cairo.

Factors Affecting on the Life Time of The Electric Joints. (Paper No. 145)
M. A. Farahat Electrical Power & Machines Department, Faculty of Engineering, Zagazig University, Egypt.

Dr. Abia A. Gado South Delta Company of Electric Distribution, Tanta, Egypt.
Prof Atef A. El Zeftawy Faculty of Engineering, Monefia University, Shebin El-Kom, Egypt.

Unified Web Based Electricity Consumers Services System. (Paper No. 201)

Optimal Location of Remote Terminal Units in Distribution System Using Genetic Algorithm. (Paper No. 296)
A.A.E. Shammah South Delta Electricity, Distribution Company SDEDCC.
A. Abou El-Ela Faculty of Engineering, Minoufiya University.
Ahmed M. Azmy Faculty of Engineering, Tanta University.

F. Al Duaij Saudi Electricity Company, Riyadh, Saudi Arabia.
M.S. Owayedh Saudi Electricity Company, Riyadh, Saudi Arabia.
M.A. El Kady Saudi Electricity Company Chair in Power System Reliability and Security College of Engineering, King Saud University, Riyadh, Saudi Arabia.
Y.A. Al Turki Saudi Electricity Company Chair in Power System Reliability and Security College of Engineering, King Saud University, Riyadh, Saudi Arabia.

Time: 14:00-16:00 Location: Fayrouz Hall

Tutorial Continued

Time: 14:00-16:00 Location: Library Room

Session D4: Control Systems Applications

Unified Power Flow Controller with Decoupled State Feedback. (Paper No. 307)
Omar H. Abdalla Oman University of Modern Sciences, & Arts, 6th of October City, Egypt.
Mohammed A. E. Ghazy October University of Modern Sciences, & Arts, 6th of October City, Egypt.
Lotfy M. Lotfy Dept. of Electrical Power and Machines Engineering, University of Helwan, Egypt.
Nermeen A. M. Hassan Dept. of Electrical Power and Machines Engineering, University of Helwan, Egypt.

Simulation Study of Conventional Control Versus MTPA-Based for PMSM Control. (Paper No. 183)
Mohamed Taha Elsayed Department of Electrical Power and Machines, Cairo University, Giza, Egypt.
Osama Ahmed Mahgoub Department of Electrical Power and Machines, Cairo University, Giza, Egypt.
Sherif Ahmed Zaid Department of Electrical Power and Machines, Cairo University, Giza, Egypt.

Gain Scheduling Adaptive PI Control of Hybrid Stepper Motor Drives. (Paper No. 121)
Mohamed S. Zaky Electrical Engineering Dept., Faculty of Engineering, Shebin El-Kom, Minoufiya University, Egypt.
Ehab M. Ismaeil Electrical Engineering Dept., Faculty of Engineering, Shebin El-Kom, Minoufiya University, Egypt.

Speed Sensorless Control of DFIG Based MRAS Observer. (Paper No. 210)
Ahmad Amar Naassani Department of Electrical Drives, University of Aleppo, Aleppo, Syria.
Abdulkader Ghazal Department of Electrical Drives, University of Aleppo, Aleppo, Syria.
Abdulkader Joukhadar Department of Mechatronics, University of Aleppo, Aleppo, Syria.
Abdel Latif El Shafei Department of Electric Power and Machines, Cairo University, Giza, Egypt.
Controlling of Two-Phase Servomotor by Changing The Phase Difference Angle Using Polynomial–Proportional Plus Integral (PPI) Controller. (Paper No. 104)

H. M. El Zoghby  Dep. of Electrical Power and Machine Engineering Faculty of Engineering, Helwan University.
S. M. Sharaf  Dep. of Electrical Power and Machine Engineering Faculty of Engineering, Helwan University.
M. A. Ghazy  Dep. of Electrical Power and Machine Engineering Faculty of Engineering, Helwan University.

Mitigating Subsynchronous Resonance Torques Using Dynamic Braking Resistor. (Paper No. 192)

S. Helmy  Armed Forces, Egypt.
Amged S. El-Wakeel  Armed Forces, Egypt.
M. Abdel Rahman  Department of electric power and machines, Faculty of engineering, Ain-Shams university, Cairo, Egypt.
M. A. L. Badr  Department of electric power and machines, Faculty of engineering, Ain-Shams university, Cairo, Egypt.
Program of Tuesday 21/12/2010

Time: 9:00-10:45  Location: Zomoroda Hall

Session A3: High Voltage (I)

**A Simulation Model of Fluid Flow and Streamlines Induced by Non-Uniform Electric Field. (Paper No. 181)**
M. Talaat  Electrical Power & Machines Department, Faculty of Engineering, Zagazig University, Egypt.

**A Study on the Topology Processor for 765kV Substation in Korea (Paper No. 318)**
Chan-Ho Lim  Department of Computer Engineering, University of Gyeongju, Gyeongju, 780-712, Korea
Won-Kun Yu  Department of Electrical Engineering, University of Kwangwoon, Seoul, Korea
Eun-Jae Lee  Department of Electrical Engineering, University of Kwangwoon, Seoul, Korea
Heung-Jae Lee  Department of Electrical Engineering, University of Kwangwoon, Seoul, Korea
Jun-Ho Park  Department of Electrical Engineering, Pusan National University, Pusan, Korea

**Improving the Under-Ground Cables Ampacity by Using Artificial Backfill Materials. (Paper No. 110)**
Ossama E. Gouda  Faculty of Engineering, Cairo University, Giza Egypt.
Adel Z. El Dein  High Institute of Energy, South Valley University, Aswan, Egypt.
Ghada M. Amer  High Institute of Technology, Benha University, Benha, Egypt.

A.El-Zein  Faculty of Engineering, Zagazig university, Zagazig, Egypt.
M.Fekry  Faculty of Engineering, Zagazig university, Zagazig, Egypt.

**Developing Dielectric Properties of Industrial Materials by Using Nano-Technology Technique. (Paper No. 142)**
Osama Gouda  Power Engineering and Machines Dept., Cairo University, Faculty of Engineering, Giza, Egypt.
Ahmed Thabet  Nano-Technology Research Centre, South Valley University, High Institute of Energy, Aswan, Egypt.
Mohamed Abdrabo  High Dam power station, Upper Egypt Electricity Generation Co. Aswan, Egypt.

**A Simulation Model for Calculating the Dielectric properties of Nano-Composite Materials and Comprehensive Interphase Approach. (Paper No. 140)**
Osama Gouda  Power Engineering and Machines Dept., Cairo University, Faculty of Engineering, Giza, Egypt.
Youssef Mobarak  Nano-Technology Research Centre, South Valley University, High Institute of Energy, Aswan, Egypt.
Mohamed Samir  Upper Egypt Electricity Distribution Co., Egyptian Electricity Holding Co., Aswan, Egypt.

**Investigation of Partial Discharge Measurement for HV Cable System with Variable Frequency. (Paper No. 128)**
A. EL Faraskoury  Egyptian Electricity Holding Company, Extra High Voltage Research Centre, Cairo, EGYPT.
F. Tahoun  Egyptian Electricity Holding Company, Extra High Voltage Research Centre, Cairo, EGYPT.
M. Awad  Egyptian Electricity Holding Company, Extra High Voltage Research Centre, Cairo, EGYPT.
O. E. Gouda  Faculty of Engineering, Cairo University, Cairo, Egypt.

**Smart Sensors and Online Condition Monitoring of High Voltage Cables for the Smart Grid. (Paper No. 289)**
R. Ambikairajah  School of Electrical Engineering & Telecommunications, University of New South Wales, Sydney, Australia.
B. T. Phung  School of Electrical Engineering & Telecommunications, University of New South Wales, Sydney, Australia.
J. Ravishankar  School of Electrical Engineering & Telecommunications, University of New South Wales, Sydney, Australia.
T. R. Blackburn  School of Electrical Engineering & Telecommunications, University of New South Wales, Sydney, Australia.
Z. Liu  School of Electrical Engineering & Telecommunications, University of New South Wales, Sydney, Australia.

Time: 9:00-10:45  Location: Lo'Iloaa Hall

Session B5: Power System Control

**Bayesian Networks for Fault Diagnosis of Large Power Generating Stations. (Paper No. 152)**
Wael M. Soliman  High Dam Power Station (HPGC), Egypt.
Mohamed A. A. Wahab  Senior Member, IEEE, Minia University.
M. M. Mansour  Ain Shams University, Egypt.
Optimal Tuning of Power System Stabilizers Using Modified Particle Swarm Optimization. (Paper No. 184)
Mahdiyeh Eslami  Department of Electrical, Electronic & Systems Engineering, University Kebangsaan Malaysia, Bangi, Selangor, Malaysia.
Hussain Shareef  Department of Electrical, Electronic & Systems Engineering, University Kebangsaan Malaysia, Bangi, Selangor, Malaysia.
Azah Mohamed  Department of Electrical, Electronic & Systems Engineering, University Kebangsaan Malaysia, Bangi, Selangor, Malaysia.

Optimal PID Tuning for Load Frequency Control Using Bacteria Foraging Optimization Algorithm. (Paper No. 191)
E. Salim Ali  Electric power & Machine Dept., Faculty of Engineering, Zagazig University, Zagazig, Egypt.
S. M. Abd-Elazim  Electric power & Machine Dept., Faculty of Engineering, Zagazig University, Zagazig, Egypt.

Identification of Coherent Groups of Generators Based on Fuzzy Algorithm. (Paper No. 303)
Mahdi M. M. El-arini  Department of Electric Power and Machines, University of Zagazig, Zagazig City, Egypt.
Ahmed Fathy  Department of Electric Power and Machines, University of Zagazig, Zagazig City, Egypt.

Optimal Reactive Power Dispatch Using Ant Colony Optimization Algorithm. (Paper No. 315)
A. A. Abou El-Ela  Department of electrical Engineering, Faculty of engineering, Monefia University, Egypt
A. M. Kinawy  Department of electrical Engineering, Faculty of engineering, Monefia University, Egypt
M. T. Mouwafi  Department of electrical Engineering, Faculty of engineering, Monefia University, Egypt
R. A. El Sehiemy  Department of electrical Engineering, Faculty of engineering, Kafr El Sheikh University, Egypt

Time: 9:00-10:45  Location: Fayrouz Hall
Session C3: Distributed Generation

Adel M. Sharaf  Centre for Energy Studies, University of Trinidad and Tobago UTT.
Adel A. A. El-Gammal  Centre for Energy Studies, University of Trinidad and Tobago UTT.

Study on Doubly Fed Induction Generator Control. (Paper No. 251)
Sherihan Ashraf Shaheen  Faculty of Engineering, Ain Shams University
Hany M. Hasanien  Faculty of Engineering, Ain Shams University
M. Abd-El Latif Badr  Faculty of Engineering, Ain Shams University

Alternative configurations for induction-generator based geared wind turbine systems for reliability and availability improvement. (Paper No. 228)
M. El Shimy  Electric Power and Machines Department, Faculty of Engineering, Ain Shams University, Cairo, Egypt.

Simple Direct Sensorless Control of Permanent Magnet Synchronous Generator Wind Turbine. (Paper No. 257)
Mahmoud M. Hussein  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mahrous E. Ahmed  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
Mohamed Orabi  APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.
M. A. Abd El Wahab  Department of Electrical Engineering, Menia University, Menia City, Egypt.
M. M. Hamada  Department of Electrical Engineering, Menia University, Menia City, Egypt.

Genetic Algorithm for Optimum Siting and Sizing of Distributed Generation. (Paper No. 196)
M. F. Kotb  Electrical Engineering Department, Faculty of Engineering, Mansoura University, Egypt.
K. M. Shebl  Electrical Engineering Department, Faculty of Engineering, Mansoura University, Egypt.
M. E. Khazendar  Electrical Engineering Department, Faculty of Engineering, Tanta University, Egypt.
A. E. Hussein  North Delta Electricity Distribution Company (NEDDC).

Optimized Sizing of High Speed PM Generator for Renewable Energy Applications. (Paper No. 231)
Adel El Shahat  Department of Electrical and Computer Engineering, The Ohio State University, Columbus, Ohio, USA.
Ali Keyhani  Department of Electrical and Computer Engineering, The Ohio State University, Columbus, Ohio, USA.
Hamed M. El Shewy  Electrical Power and Machines Department, Faculty of Engineering, Zagazig University, Zagazig, Egypt.
**Multi-Deployment of Dispersed Power Sources Using RBF Neural Network. (Paper No. 254)**

Yaser Soliman Qudaih
Department of Computer Science and Electrical Engineering, Kumamoto University, Kurokami, Kumamoto, Japan.

Syafaruddin
Department of Computer Science and Electrical Engineering, Kumamoto University, Kurokami, Kumamoto, Japan.

Takashi Hiyama
Department of Computer Science and Electrical Engineering, Kumamoto University, Kurokami, Kumamoto, Japan.

**Comparative Study On Modelling Of Gas Turbines In Combined Cycle Power Plants (Paper No. 317).**

H. E. M. A. Shalan
El-Kureimat Power Station, Ministry of Electricity, Cairo, Egypt.

M. A. Moustafa
Electrical Power Department, Faculty of Engineering, Cairo University, Giza, Egypt.

Hassan

A. B. G. Bahgat
Electrical Power Department, Faculty of Engineering, Cairo University, Giza, Egypt.

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**Time:** 9:00-10:45  
**Location:** Library Room

**Session D5: Electric Drives (I)**

**Model Predictive Control of A Speed Sensorless Linear Induction Motor Drive. (Paper No. 173)**

Ahmed Abd Eltawwab Hassan
Faculty of Engineering, Minia University, Minia, Egypt.

Yehia Sayed Mohamed
Faculty of Engineering, Minia University, Minia, Egypt.

Takashi Hiyama
Faculty of Electrical Engineering & Computer Science, Kumamoto University, Kumamoto, Japan.

Tarek Hassan Mohamed
Faculty of Electrical Engineering & Computer Science, Kumamoto University, Kumamoto, Japan.

**Stability Analysis of Simultaneous Estimation of Speed and Stator Resistance for Sensorless Induction Motor Drives. (Paper No. 180)**

Mohamed S. Zaky
Electrical Engineering Dept., Faculty of Engineering, Monefia University, Shebin El-Kom, Minoufiya, Egypt.

**Combination of Transient and Fundamental Wave Excitation for Low and Zero Speed Sensorless Control of Induction Machines. (Paper No. 302)**

M.K. Metwally
Department of Electrical Engineering, Faculty of Engineering, Monefia University, Shebin El-Kom, Egypt.

T.M. Wolbank
Department of Electrical Drives and Machines, Vienna University of Technology, Vienna, Austria.

**Speed Estimation performance for Multiphase Induction Machines under Fault Conditions. (Paper No. 218)**

Shady M. Gadoue
Department of Electrical Engineering, Alexandria University, Alexandria, Egypt.

Ayman S. Abdel Khalik
Department of Electrical Engineering, Alexandria University, Alexandria, Egypt.

**Fuzzy-Based Speed Control Of Five-Phase Induction Motor. (Paper No. 268)**

I. Bedir
Faculty of Engineering, Tanta University, Tanta, Egypt.

Abd Elwashab Hassan
Faculty of Engineering, Tanta University, Tanta, Egypt.

M. A. El khazendar
Faculty of Engineering, Tanta University, Tanta, Egypt.

S. A. Mahmoud
Faculty of Engineering, Shebin El-Kom, Minoufiya university, Egypt.

**Dynamic Simulation of Switched Reluctance Motor using Matlab and Fuzzy Logic. (Paper No. 291)**

M. Nagrial
Power Conversion and Intelligent Motion Control Group, University of Western Sydney, Locked Bag 1797, Penrith South DC, NSW 1797 Australia.

J. Rizk
Power Conversion and Intelligent Motion Control Group, University of Western Sydney, Locked Bag 1797, Penrith South DC, NSW 1797 Australia.

W. Aljaism
Power Conversion and Intelligent Motion Control Group, University of Western Sydney, Locked Bag 1797, Penrith South DC, NSW 1797 Australia.

**Modeling of Induction motor Based on Winding Function Theory to Study Motor under Stator/Rotor Internal Faults. (Paper No. 215)**

Ahmed K. Ibrahim
Electrical power and Machine department, Ain-Shams university, Cairo, Egypt.

Mostafa I. Marei
Electrical power and Machine department, Ain-Shams university, Cairo, Egypt.

Hamdy S. El Gohary
Electrical power and Machine department, Ain-Shams university, Cairo, Egypt.

Somaya A. Mohamed
Electrical power and Machine department, Ain-Shams university, Cairo, Egypt.
Experimental Verification of A New Variable Hysteresis Band Current Controlled VSI Fed Induction Motor drives. (Paper No. 283)
Ahmed E. kalas Electrical Engineering Department, Faculty of Engineering, Suez Canal University, Port Said, Egypt.
M.El-shahat Dessouki Electrical Engineering Department, Faculty of Engineering, Suez Canal University, Port Said, Egypt.
Elwy E.Elkholy Electrical Engineering Department, Faculty of Engineering, Menoufiya University, Shebin El-Kom, Egypt.

Time: 11:00-13:00 Location: Zomoroda Hall

Session A4: High Voltage (II)

Earth Surface Potentials and GPR for Grids Having Different Conductors’ Distributions Buried in different Layer Soil Structures. (Paper No. 229)
Osama Elsayed Gouda Department of Electrical Power and Machines, Faculty of Engineering, Cairo University.

Study Transient Impedance of Spherical Electrode Buried in the Ground. (Paper No. 260)
Mohamed Nayel Assiut University, Electrical Engineering Department, Assiut, Egypt.

Simplified Approach to Calculate the Back Flashover Voltage of Shielded H.V. Transmission Line Towers. (Paper No. 120)
Ghada M. Amer Higher Institute of Technology, Banha University, Banha, Egypt.

New Concept for Lightning Protection of Ships: The Leader Potential Concept Method. (Paper No. 185)
Ahmed A. Hossam-Eldin Department of Electrical Engineering, Alexandria University, Alexandria, Egypt.
Abdalla Badr Abdalla Department of Electrical Engineering, Alexandria University, Alexandria, Egypt.

Tall-Structure Lightning Return-Stroke Modelling. (Paper No. 313)
M. Milewski Electrical and Computer Engineering Department, Ryerson University, Toronto, Ontario, Canada.
A.M. Hussein Electrical and Computer Engineering Department, Ryerson University, Toronto, Ontario, Canada.

Parameters Affecting the Back Flashover Across the Overhead Transmission Line Insulator Caused by Lightning. (Paper No. 111)
Ossama E. Gouda Faculty of Engineering, Cairo University, Giza Egypt.
Adel Z. El Dein High Institute of Energy, South Valley University, Aswan, Egypt.
Ghada M. Amer High Institute of Technology, Benha University, Benha, Egypt.

Charge Meter for Impulse-Voltage Measurement. (Paper No. 146)
I. A. Metwally Sultan Qaboos University, College of Engineering, Department of Electrical & Computer Engineering, Muscat-123, Sultanate of Oman.

Corona Onset Voltage and Corona Power Losses in an Indoor Corona Cage. (Paper No. 286)
Cem Eroncel Department of Electrical Engineering, Istanbul Technical University, Maslak, Istanbul, Turkey.
Suat Ilhan Department of Electrical Engineering, Istanbul Technical University, Maslak, Istanbul, Turkey.
Aydogan Ozdemir Department of Electrical Engineering, Istanbul Technical University, Maslak, Istanbul, Turkey.
Adnan Kaypmaz Department of Electrical Engineering, Istanbul Technical University, Maslak, Istanbul, Turkey.

Experimental Evaluation of Rogowski Coil Performance for Locating PD in Energized Overhead Covered-Conductor Feeder. (Paper No. 239)
M. Isa Department of Electrical Engineering, Aalto University School of Science and Technology, Espoo, Finland.
G. M. Hashmi Department of Electrical Engineering, Aalto University School of Science and Technology, Espoo, Finland.
M. Lehtonen Department of Electrical Engineering, Aalto University School of Science and Technology, Espoo, Finland.
N. I. Elkalashy Department of Electrical Engineering, Shebin Elkom, Minoufiya University, Egypt.
N. Tarhuni Department of Electrical and Computer Engineering, Sultan Qaboos University, Oman.

Magnetic Field Exposure Assessment of Lineman Brain Model during Live Line Maintenance. (Paper No. 109)
M. A. Abd-Allah Department of Electrical Engineering, University of Benha, Shoubra, Cairo, Egypt
Reda E. Morsi Department of Electrical Engineering, University of Benha, Shoubra, Cairo, Egypt
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<th>Time: 11:00-13:00</th>
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<tr>
<td>Session B6: Power System Protection (I)</td>
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</table>

**Non-Linear HIF Detection and Classification for Egyptian 500 kV Transmission Line. (Paper No. 147)**

Saber Mohamed Saleh Ministry of Electricity and Energy, Cairo, Egypt.
Doaa khalil Ibrahim Faculty of Engineering, Cairo University.

**An Ellipse Technique Based Relay For Extra High Voltage Transmission Lines Protection. (Paper No. 162)**

Ali M. El-Rifaie National Institute of Standards (NIS), Haram, Giza, Egypt.
Sohair Fakhry National Institute of Standards (NIS), Haram, Giza, Egypt.
Alaa M. Hamdy Faculty of Engineering, Helwan University, Helwan, Cairo, Egypt.
S. M. Moussa Faculty of Engineering, Helwan University, Helwan, Cairo, Egypt.
E.H.Shehab El_Din Faculty of Engineering, Helwan University, Helwan, Cairo, Egypt.

**Discrimination Approach of Large Modern Power Transformer Internal Faults and Inrush Currents. (Paper No. 178)**

Wael Hamdy Yousef Power Generation Engineering and Services Company, PGESCO.
Doaa khalil Ibrahim Electrical Power and Machines Department, Faculty of Engineering, Cairo University.
Essam Abo El-Zahab Electrical Power and Machines Department, Faculty of Engineering, Cairo University.

**A Classification Technique for Protection Coordination Assessment of Distribution Systems with Distributed Generation. (Paper No. 190)**

A. F. Naïem Department of Electrical Power & Machines, Faculty of Engineering, Ain Shams University, Cairo, Egypt.
Y. Hegazy Department of Electrical Power & Machines, Faculty of Engineering, Ain Shams University, Cairo, Egypt.
A. Y. Abdelaziz Department of Electrical Power & Machines, Faculty of Engineering, Ain Shams University, Cairo, Egypt.
M. A. Elsharkawy Department of Electrical Power & Machines, Faculty of Engineering, Ain Shams University, Cairo, Egypt.


S. Mahmoud Elect. Eng. Dept., Mansoura University, Mansoura, Egypt.

**Do Utilities Still Need Stand Alone Disturbance Recorders? (Paper No. 304)**

Mohamed A. El-Hadidy Egyptian Electricity Transmission Company (Eetc), Egypt.
Dalal H. Helmi Egyptian Electricity Transmission Company (Eetc), Egypt.
Maha S. Abdelhady Egyptian Electricity Transmission Company (Eetc), Egypt.

**Transmission Line Faults Classification Using Wavelet Transform. (Paper No. 225)**

S. A. Shaaban Assistant Lecture –High Institute of Energy, South Valley University Egypt.
Takashi Hiyama Department of computer science and electrical engineering, Graduate School of science and Technology, Kumamoto University, Japan.

**Then Versus Now: A Comparison of Total Scheme Complexity. (Paper No. 300)**

Bob Morris Schweitzer Engineering Laboratories, Inc., USA
Roy Moxley Schweitzer Engineering Laboratories, Inc., USA
Christina Kusch Schweitzer Engineering Laboratories, Inc., USA

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<th>Time: 11:00-13:00</th>
<th>Location: Fayrouz Hall</th>
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<tr>
<td>Session C4: Photovoltaic Energy Systems</td>
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**Comparison Study of Maximum Power Point Tracker Techniques for PV Systems. (Paper No. 278)**

Hairul Nissah Zainudin Electrical Department, Engineering Faculty, University of Malaya, Kuala Lumpur, Malaysia.
Saad Mehkielf Electrical Department, Engineering Faculty, University of Malaya, Kuala Lumpur, Malaysia.
Two stages Maximum Power Point Tracking Algorithm for PV Systems Operating Under Partially Shaded conditions. (Paper No. 265)

Hamdy Radwan APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Omar Abdel Rahim APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Mahrous Ahmed APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Mohamed Orabi APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

High Performance Power Conditioning For Grid Connected PV Module. (Paper No. 274)

Omar Abdel Rahim APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Mohamed Orabi APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Mahrous Ahmed APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Impacts Of Photovoltaic And Wind Energies On The Voltage Profile And Power Losses Of Distribution Systems. (Paper No. 279)

Karar Mahmoud APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Mamdouh Abdel Akher APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Optimum Design and Implementation of Stand-Alone Tracking Photovoltaic Power System Based on PLC and Microcontroller. (Paper No. 129)

Dr. Osama Gouda Faculty of Engineering, Cairo University, Cairo, Egypt.

Dr. Ghada Amer Department of Power Engineering, Benha University.

Dr. Tamer El khodragy Department of Power Engineering, Benha University.

Eng. Mohammed Awaad Department of Power Engineering, Benha University.

Simple Maximum Power Point Controller for Single phase Grid-Connected PV System. (Paper No. 123)

Ahmed A. A. Hafez Electrical Engineering Department, Faculty of Engineering, Assiut University, Assiut, Egypt.

Daniel Montesinos-Miracle Centre D'Innovació Tecnològica En Convertidors Estàtics i Accionaments (CITCEA-UPC), Departament D'Enginyeria Elèctrica, Universitat Politècnica De Catalunya.ETS d'Enginyeria Industrial de Barcelona, Av. Diagonal, 647, Pl. 2. 08028 Barcelona, Spain.

Antoni Sudrià-Andreu Centre D'Innovació Tecnològica En Convertidors Estàtics i Accionaments (CITCEA-UPC), Departament D'Enginyeria Elèctrica, Universitat Politècnica De Catalunya.ETS d'Enginyeria Industrial de Barcelona, Av. Diagonal, 647, Pl. 2. 08028 Barcelona, Spain.

Studying of the Available Wind and Photovoltaic Energy Resources in Egypt. (Paper No. 258)

Mahmoud M. Hussein APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Mustafa Mosa APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Mamdouh Abdel Akher APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Mohamed Orabi APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

Mahrous E. Ahmed APEARC, Department of Electrical Engineering, South Valley University, Aswan City, Egypt.

M. A. Abd El Wahab Department of Electrical Engineering, Menia University, Menia City, Egypt.

M. M. Hamada Department of Electrical Engineering, Menia University, Menia City, Egypt.

Time: 11:00-13:00 Location: Library Room

Session D6: Electric Drives (II)

Approaches for Minimizing the Torque Ripples in the Switched Reluctance Motor. (Paper No. 245)

Eyhab El Kharashi Department of Electrical Power & Machines, Faculty of Engineering, Ain Shams University, Abdou Basha Square, Abbassia, Cairo, Egypt.

Optimum Design Parameters For Synchronous Reluctance Motors. (Paper No. 290)

J. Rizk School of Engineering, University of Western Sydney, Australia.

M. H. Nagrial School of Engineering, University of Western Sydney, Australia.

A. Hellany School of Engineering, University of Western Sydney, Australia.

Speed Control of Switched Reluctance Motor Based on Fuzzy Logic Controller. (Paper No. 166)

Gamal M. Hashem Department of Electrical Power and Machines, Ain Sham University, Cairo, Egypt.

Hany M. Hasanien Department of Electrical Power and Machines, Ain Sham University, Cairo, Egypt.
Effects of Single Phase AC / DC Converter Drive on the Torque-Speed Characteristic of DC Motor. (Paper No. 284)
Mohamed. A. Enany       Electrical Power & Machines Department, Faculty of Engineering, Zagazig University, Zagazig, Egypt.

Brushless DC Motor Performance Improvement through Switch-on and Switch-off Angles Control. (Paper No. 285)
Mohamed. A. Enany       Electrical Power & Machines Department, Faculty of Engineering, Zagazig University, Zagazig, Egypt.
Hamed. M. Elshewy       Electrical Power & Machines Department, Faculty of Engineering, Zagazig University, Zagazig, Egypt.
Fathy. E. Abdel-kader   Electrical Engineering Department, Faculty of Engineering, Menofeya University, Shebin El-Koum, Egypt.

Time: 14:00-16:00          Location: Zomoroda Hall
Session A5:  Power System Protection (II)

A Combined MODELS-TACS ATPdraw General Model of the High Impedance Faults in Distribution Networks. (Paper No. 220)
Kamal M. Shebl           Electrical Engineering Department, Faculty of Engineering, Mansoura University, Mansoura, Egypt.
Ebrahim A. Badran        Electrical Engineering Department, Faculty of Engineering, Mansoura University, Mansoura, Egypt.
Elsaeed Abdalla         Electrical Engineering Department, Faculty of Engineering, Mansoura University, Mansoura, Egypt.

A New Fault Detection Technique Based on Features Measurements of Current Versus Voltage Image for Extra High Voltage Transmission Line. (Paper No. 155)
Ali M. El Rifaie        National Institute of Standards (NIS), Haram, Giza, Egypt.
Sohair Fakhry           National Institute of Standards (NIS), Haram, Giza, Egypt.
Alaa M. Hamdy           Faculty of Engineering, Helwan University, Helwan, Cairo, Egypt.
S. M. Moussa            Faculty of Engineering, Helwan University, Helwan, Cairo, Egypt.
E. H. Shehab El Din     Faculty of Engineering, Helwan University, Helwan, Cairo, Egypt.

Blocking of Distance Relays Zone3 under Load Encroachment Conditions- A New Approach Using Phasor Measurements Technique. (Paper No. 200)
Amr El-Hadidy           Institute of Power Systems and Power Economics, TU-Dortmund, Dortmund, Germany.
Christian Rehtanz       Institute of Power Systems and Power Economics, TU-Dortmund, Dortmund, Germany.

Improving Transmission Line Performance using Transient Based Adaptive SPAR. (Paper No. 249)
O. E. Gouda             Department of Electrical Power Engineering, Cairo University, Cairo, Egypt.
D. K. Ibrahim           Department of Electrical Power Engineering, Cairo University, Cairo, Egypt.
D. H. Helmi             Egyptian Electricity Transmission Company, Cairo, Egypt.
D. M. Khalifa           Egyptian Electricity Transmission Company, Cairo, Egypt.
G. M. Amer              Higher Institute of Technology, Banha University, Banha, Egypt.

Using Time Error Differential Measurement in Protection Applications. (Paper No. 301)
Roy Moxley              Schweitzer Engineering Laboratories, Inc., USA
Mirek Wronski           Schweitzer Engineering Laboratories, Inc., USA

Session B7:  Hybrid Energy Systems

Time: 14:00-16:00          Location: Lo’Iboa Hall

A New GA-Based Self Regulating PID Controller for Hybrid PV-FC-Diesel-Battery Electric Vehicles. (Paper No. 174)
Adel M. Sharaf           Centre for Energy Studies, University of Trinidad and Tobago UTT.
Adel A. A. El-Gammal     Centre for Energy Studies, University of Trinidad and Tobago UTT.
Global Hyper Saline Power Generation Qattara Depression Potentials (Paper No. 320)
Maher Kelada MIK Technology, Houston, Texas, USA

Performance of Stand-alone Hybrid wind-Photovoltaic System with Battery Storage. (Paper No. 297)
O. E. M. Youssef Faculty of Engineering at Shoubra, Benha University, Cairo, Egypt.
N. M. B. Abdel-Rahim Faculty of Engineering at Shoubra, Benha University, Cairo, Egypt.
A. Shaltout Faculty of Engineering, Cairo University, Cairo, Egypt.

Integration of Photovoltaic-Fuel Cell Scheme for Energy Supply in Remote Areas. (Paper No. 130)
Mohamed A. H. El Sayed Electrical Engineering Department, Kuwait University.

Hybrid Wind-Fuel Cell Renewable Energy Utilization Scheme for Village Electricity. (Paper No. 132)
Mohamed A. H. El Sayed Electrical Engineering Department, Kuwait University.

Modeling and Analysis of a PEM Fuel cell for Electrical Applications. (Paper No. 217)
Adel A. Elbaset Dept. of Electrical Engineering, Minia University, Minia, Egypt.

Small Scale Wave Energy Utilization for Water Pumping. (Paper No. 131)
Mohamed A. H. El Sayed Electrical Engineering Department, Kuwait University.

Integration of Distributed Generators Units into Distribution Networks. (Paper No. 288)

Improvement of Energy-Capturing Efficiency in Standalone Photovoltaic Systems with Battery Storage. (Paper No. 295)
O. E. M. Youssef Faculty of Engineering at Shoubra, Benha University, Cairo, Egypt.
N. M. B. Abdel Rahim Faculty of Engineering at Shoubra, Benha University, Cairo, Egypt.
A. Shaltout Faculty of Engineering, Cairo University, Cairo, Egypt.

Selection of Optimum Hybrid Stand Alone Systems. (Paper No. 321)
Belgin Emre Turkay Electrical Engineering Department, Istanbul Technical University, Ayazağa, Turkey.

Time: 16:00-16:30 Location: Zomoroda Hall

Closing and Recommendations
Roshdy Radwan Faculty of Engineering, Cairo University.
Zeinab Hanem Osman Faculty of Engineering, Cairo University.
Magdy El Marsafawy Faculty of Engineering, Cairo University.