

CURRICULUM VITAE

PERSONAL INFORMATION

Name: Mahmoud Mahrous Amery Aref.
Address: Electrical Engineering Department, Faculty of Engineering,
Assiut University, Assiut, Egypt.
Date of Birth: September, 15, 1984, Sohag, Egypt.
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EDUCATION

- Sep 2016 _ June 2020 Department of Automated Electrical Systems, Ural Power Engineering Institute, Ural Federal University, Russia
Doctor of Philosophy degree (PhD) in Electrical Engineering and Systems science
PhD thesis entitled
“MODELING OF RENEWABLE ENERGY SOURCES FOR CALCULATION OF SHORT CIRCUIT CURRENTS OF LOCAL DISTRIBUTION SYSTEMS OF EGYPT”
- Ref. Prof. Vladislav Petrovich Oboskalov, ypo1704@mail.ru, the research supervisor.
- Sep 2007 _ March 2012 Assiut University, Faculty of Engineering, Egypt
Master of Science in Electrical Engineering
Master thesis entitled
“STEADY-STATE AND TRANSIENT ANALYSES OF WIND-FARM CONNECTED TO AN ELECTRIC GRID WITH VARYING STIFFNESS”
- Ref. Prof. Mazen Abdel-Salam, mazen2000as@yahoo.com , the research supervisor.
- Sep 2002 – June 2006 Assiut University, Faculty of Engineering, Egypt
Bachelor of Electrical Engineering “Power and Machine” section
Grade: Excellent with Honor 87.91%
Rank: 1st
Project: **“IMPROVEMENT OF EGYPTIAN ELECTRIC NETWORK”**
Project Grade: Excellent

WORK EXPERIENCE

- September 2020 **Faculty of Engineering Assiut University**
Position: Lecturer (Assistant Professor)
- April 2012 _ 2020 **Faculty of Engineering Assiut University**
Position: Assistant Lecturer
- January 2007 _ 2012 **Faculty of Engineering Assiut University**
Position: Teaching Assistant
Responsibilities:
 - M.Sc. Researcher in the field of Power system (Renewable energy)
 - Ph.D. Researcher in the field of Power system (Renewable energy)

- Provides teaching assistant for students in the following courses.

Electric Circuit Theory (1)	Electric Circuit Theory (2)
Electric Field	Power Electronic Circuits
Electric Machines	Power System Analysis
Power Systems Voltage Stability	Power Systems Power Quality
Power System Control	

- Participates in Final year graduations projects.
 - Improvement of Egyptian Electric Network
 - Egyptian Power Network Analysis.
 - Photovoltaic System Feeding an Irrigation Load
 - Hybrid Wind-Solar stand-alone system for irrigation 10 acres in Toshka

GRADUATE RESEARCH PROJECTS

I participated in the following Research Projects

- A Stand-alone residential PV system (Funded by STDF of Egypt)
- A hybrid Solar-Wind Generation Based Micro-Grid for the Irrigation System of A Major Land Reclamation Project in Egypt-Case Study of the Toshka Project (Funded by STDF of Egypt cooperated with STDF of USA)

RESEARCH INTERESTS

- Electrical Power Industrial Application.
- Reliability and Security of Electric Power Systems
- Probabilistic Methods Applied to Power System Analysis
- Integration of Renewable Energy Sources
- Utility interactive power conditioner for renewable energy sources.
- The Energy management of energy storage systems for microgrid and electrical vehicle applications.
- Development of methods for more efficient maintenance techniques and methods for power system asset management
- Protection and control of microgrid and smart grid
- Reliability – based Appraisal of Smart Grid Challenges and Realization
- Resource Adequacy in Electricity Markets

PUBLICATIONS

1. Rashad.M.Kamel, **Mahmoud Mahrous**, Aymen Chaouachi and Ken Nagasaka, "Improvement of Micro-Grid Dynamic Performance During Islanding Mode Using Fuzzy Logic Controller", was published in the thirteen international middle east power systems conference (MEPCON'2009) December 21-23, 2009, pp. 699-704.
2. Mazen Abdel-Salam, Adel Ahmed, and **Mahmoud Mahrous** " Transient analysis of grid-connected wind-driven PMSG, DFIG and SCIG at fixed and variable speeds" Journal of Innovative Systems Design and Engineering, Vol 2, No 3, pp. 128-134, 2011
3. Mazen Abdel-Salam, Adel Ahmed, and **Mahmoud Mahrous** " Steady-state and transient analyses of wind farm connected to an electric grid with varying stiffness", 14th MEPCON International Middle East Power System Conference, pp. 203-208, Cairo, Egypt, Dec. 19-21, 2010.
4. Mazen Abdel-Salam, Adel Ahmed, **Mahmoud Amery**, Mohamed Swify, Ahmed El-kousy, and Khairy Sayed, "Design and Implementation of Stand-alone Residential PV System", Proceedings of the IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), Amman, Jordan, pp. 50-55, Dec. 6-8, 2011.
5. Mazen Abdel-Salam, Adel Ahmed, Hamdy Ziedan, Khairy Sayed, **Mahmoud Amery**, and Mohamed Swify "A Solar-Wind Hybrid Power System for Irrigation in Toshka Area", Proceedings of the IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), Amman, Jordan, pp. 38-43, Dec. 6-8, 2011.

6. Mazen Abdel-Salam, Adel Ahmed, Hamdy Ziedan, Rashad Kamel, Khairy Sayed, **Mahmoud Amery**, and Mohamed Swify , “Steady-state Modeling and Control of a Microgrid Supplying Irrigation Load in Toshka Area”, Submitted for publication in the 38th IEEE Industrial Electronics Society conference (IECON), Montreal, Canada, October 25-28, 2012.
7. Mazen Abdel-Salam, Adel Ahmed, Hamdy Ziedan, Rashad Kamel, Khairy Sayed, **Mahmoud Amery**, and Mohamed Swify , “Analysis of Protection System for a Microgrid Supplying Irrigation Load in Toshka Area”, Submitted for publication in the 38th IEEE Industrial Electronics Society conference (IECON), Montreal, Canada, October 25-28, 2012.
8. Mazen Abdel-Salam, Adel Ahmed, Hamdy Ziedan, Rashad Kamel, Khairy Sayed, **Mahmoud Amery**, and Mohamed Swify, Hassan El-kishky, “Aggregation of Microgrids for Irrigation in Toshka Area”, Accepted in International Conference on CLEAN ELECTRICAL POWER Renewable Energy Resources Impact Alghero, Sardinia – Italy June 11th-13th, 2013.
9. Mazen Abdel-Salam, Adel Ahmed, Hamdy Ziedan, Rashad Kamel, Khairy Sayed, **Mahmoud Amery**, Mohamed Swify, Hassan El-kishky and Mohsen Khalaf “Effect of Micro-Grid Renewable Micro-sources on Short Circuit Capacity of Hosted Distribution Networks”, INTELEC 2013, 35th International Telecommunications Energy Conference,, Hamburg, Germany from 13 - 17 October 2013.
10. Mazen Abdel-Salam, Adel Ahmed, Hamdy Ziedan, Rashad Kamel, Khairy Sayed, **Mahmoud Amery**, and Mohamed Swify, Hassan El-kishky and Mohsen Khalaf “Adaptive and Intelligent Protection System for Micro Grid Operates In Both Grid Connected and Islanding Modes”, INTELEC 2013, 35th International Telecommunications Energy Conference,, Hamburg, Germany from 13 - 17 October 2013.
11. Mazen Abdel-Salam, Adel Ahmed, Ahmed El-kousy, Kamel, Khairy Sayed, **Mahmoud Amery**, and Mohamed Swify and Mohsen Khalaf , “On the Design and Operation of a Standalone Residential PV System in Egypt”, INTELEC 2013, 35th International Telecommunications Energy Conference,, Hamburg, Germany from 13 - 17 October 2013.
12. **Ареф М.**, Обоскалов В.П. Удинцев В.Н. Цифровое управление трехфазным инвертором для солнечных батарей // ПромЭнергетика, 2018, с.50-58.
13. **Aref, M.**, Oboskalov, V., Mahnitko, A., Varfolomejeva, R. “Protection design scheme of grid connected PMSG wind turbine”, 2017 IEEE 58th Annual International Scientific Conference on Power and Electrical Engineering of Riga Technical University, RTUCON 2017 – Proceedings 2017-November, c. 1-6.
14. **Aref M.**, Meneam, A., Oboskalov, V., Mahnitko, A., “Transient analysis of AC and DC microgrid with effective of SFCL”, 2018 IEEE 59th Annual International Scientific Conference on Power and Electrical Engineering of Riga Technical University, RTUCON 2018 - Proceedings 8659839, pp. 1-6.
15. **Aref, M.**, Ahmed, I., Oboskalov, V., Mahnitko, A., “Microcontroller look-up table of digital control MPPT of PV system “, 2018 IEEE 59th Annual International Scientific Conference on Power and Electrical Engineering of Riga Technical University, RTUCON 2018 - Proceedings 8659900, pp. 1-5.
16. **Aref M.** and Oboskalov V., “A Proposed Approach to Fault Current Calculation for Microgrid Considering the Uncertainties of Fault and Distribution Generations Locations”, 2020 International Conference on Industrial Engineering, Applications and Manufacturing (ICIEAM), 18-22 May 2020, Sochi, Russia, No. 19674621, pp. 1-5.
17. **Aref, M.**, Ahmed, I., Oboskalov, V., "Digital Control strategy for SPWM MPPT of PV System with Three-Phase NPC Three-Level Converter", Indonesian Journal of Electrical Engineering and Computer Science, Vol 19, No 2: August 2020, pp. 572-585.

LANGUAGES

ILETS Score = 5,

Reading = 4.5, Listening = 5.5, Speaking = 5, Writing = 5.5.

IBT Score = 67,

Reading = 16, Listening = 16, Speaking = 17, Writing = 18.

COMMUNICATION AND PRESENTATIONS SKILLS

International conferences Speaking

I have presented my papers in the following international conferences

- IEEE Middle East Power System Conference (MEPCON’2009), Assiut, Egypt.
- IEEE Middle East Power System Conference (MEPCON’2010), Cairo, Egypt.

TECHNICAL SKILLS

- Matlab & Simulink

- PSCAD Simulation
- PSIM
- Microsoft Office
- FORTRAN 95
- C++

SOFT SKILLS

Attended the following Workshops in Assiut University Faculty and Leadership Development Project (FLDP)

- Communication Skills
- Effective Thinking
- Effective Teaching
- Effective Presentation
- Science Publication

References

1. Mazen Abdel-Salam

Professor, Fellow of IEEE (USA), Fellow of IET (UK), Fellow of IOP (UK), Fellow of AVH (Germany), Fellow of JSPS (Japan)

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2. Vladislav Petrovich Oboskalov

Professor, Automatic control system Department, Ural power engineering institute, Ural Federal University, Yekaterinburg, Russia

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3. Adel Abdu H. Ahmed

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