

Biographical Sketch

Paul Moses

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A. PROFESSIONAL PREPARATION

Curtin University of Technology	Perth, Australia	Physics	B.S.	2004
Curtin University of Technology	Perth, Australia	Electrical Engineering	B.Eng.	2006
Curtin University of Technology	Perth, Australia	Electrical Engineering	Ph.D.	2012

B. APPOINTMENTS

2017-Present	Assistant Professor, School of Electrical and Computer Engineering, Gallogly College of Engineering, The University of Oklahoma, Norman, Oklahoma USA
2017 (summer)	Professorial Lecturer, Engineering and Systems Management, George Washington University, Washington, DC USA
2014-2017	Assistant Professor, Engineering Technology Department, Frank Batten College of Engineering, Old Dominion University, Norfolk, Virginia USA
2012-2014	Electrical Power Engineer, Australian Defence Science and Technology Group, Maritime Platforms Division, Department of Defence, Australia
2009-2012	Doctoral Researcher, Curtin University, Australia
2007-2009	Electrical Engineer, Australian Defence Science and Technology Organisation, Maritime Operations Division, Department of Defence

C. PRODUCTS

(i) Most Closely Related to the Proposed Project

1. **P. S. Moses**, M. Djibo, J. N. Jiang, and E. Kevric. 2017. Microgrid Experiences in Marine Power and Energy Systems: Stability Issues in Power Electronic Interfaces. In: Proc. 2017 50th Frontiers of Power Conference, Stillwater, Oklahoma.
2. W. Fei, E. Browning, **P. S. Moses**, and J. N. Jiang. 2017. Understanding the Impact of Measurement Errors on Grid Structure Monitoring and Intrusion Detection. In: Proc. 2017 50th Frontiers of Power Conference, Stillwater, Oklahoma.
3. S. Deilami, A. Masoum, **P. S. Moses**, and M. A. S. Masoum. 2011. Real-time Coordination of Plug-In Electric Vehicle Charging in Smart Grids to Minimize Power Losses and Improve Voltage Profile. *IEEE Transactions on Smart Grid*. 2:456-467.
4. A. Masoum, S. Deilami, **P. S. Moses**, M. A. S. Masoum, and A. Abu-Siada. 2011. Smart Load Management of Plug-In Electric Vehicles in Distribution and Residential Networks with Charging Stations for Peak Shaving and Loss Minimization Considering Voltage Regulation. *IET Generation, Transmission & Distribution* 5:877-888.
5. **P. S. Moses**, M. A. S. Masoum, and K. M. Smedley. 2011. Harmonic Losses and Stresses of Nonlinear Three-phase Distribution Transformers Serving Plug-In Electric Vehicle Charging

Stations. In: Proc. International Conference on Innovative Smart Grid Technologies (ISGT), Anaheim, California USA. pp. 1-6.

(ii) *Other Significant Products*

1. **P. S. Moses** and M. A. S. Masoum. 2012. Three-phase Asymmetric Transformer Aging Considering Voltage Current Harmonic Interactions, Unbalanced Nonlinear Loads, Magnetic Couplings and Hysteresis. *IEEE Transactions on Energy Conversion*. 27:318-327.
2. M. Mesbah, **P. S. Moses**, S. M. Islam, and M. A. S. Masoum. 2014. Digital Implementation of a Fault Emulator for Transient Study of Power Transformers Used in Grid Connection of Wind Farms. *IEEE Transactions on Sustainable Energy*. 5:646-654, 2014.
3. **P. S. Moses**, M. A. S. Masoum, and H. A. Toliyat. 2011. Impacts of Hysteresis and Magnetic Couplings on the Stability Domain of Ferroresonance in Asymmetric Three-phase Three-leg Transformers. *IEEE Transactions on Energy Conversion*. 26(2):581-592.
4. **P. S. Moses**, M. A. S. Masoum, and H. A. Toliyat. 2010. Dynamic Modeling of Three-phase Asymmetric Power Transformers with Magnetic Hysteresis: No-load and Inrush Conditions. *IEEE Transactions on Energy Conversion*. 25(4):1040-1047.
5. M. A. S. Masoum and **P. S. Moses**. 2010. Impact of Balanced and Unbalanced Direct Current Bias on Harmonic Distortion Generated by Asymmetric Three-phase Three-leg Transformers. *IET Electric Power Applications*. 4(7):507-515.

D. SYNERGISTIC ACTIVITIES

- Director of the Laboratory for Electrical Energy and Power Systems (LEEPS) in the School of Electrical and Computer Engineering at The University of Oklahoma. This lab initiative is dedicated to experimental research in microgrids of shipboard power systems and terrestrial applications. The focus of research is on electromagnetic transient disturbance phenomena and their impacts of insulation stresses in electrical machines and transformers (2017-present)
- Assistant Professor developing new course material for online distance learning as well as traditional classroom instruction in sustainable energy and electrical power and machinery courses. An entirely new and unique course was developed for teaching marine power and energy systems in addition to conventional utility grids covering advanced topics in transmission and distribution, power quality, energy storage, electrical machine theory, protection systems and alternative energy (2014-present)
- Technical Lead Engineer for developing high-budget R&D test facilities for real-time modelling and simulation of naval power systems for the Australian Department of Defence (2012-2014)
- Researcher in smart grid distribution systems working in topics related to demand side management, real-time customer-utility interaction, centralized and decentralized control of smart appliances and coordination of distributed energy sources and plug-in electric vehicles (ongoing)
- Regularly called to be a reviewer for *IEEE Transactions on Power Systems*, *IEEE Transactions on Smart Grids*, *IEEE Transactions on Power Delivery*, and *IET Generation Transmission and Distribution* (ongoing)