Editorial

Ahmed F. Zobaa*

Electrical Power and Machines Department Faculty of Engineering Cairo University Giza, 12613, Egypt E-mail: a.zobaa@eng.cu.edu.eg *Corresponding author

Eduardo N. Asada

Department of Electrical Engineering Engineering School of São Carlos University of São Paulo 13566–590, São Carlos, Brazil E-mail: asada@sel.eesc.usp.br

Rubén Romero

Department of Electrical Engineering Universidade Estadual Paulista Júlio de Mesquita Filho 15385–000, Ilha Solteira, Brazil E-mail: ruben@dee.feis.unesp.br

Walmir Freitas

Department of Electrical Energy Systems State University of Campinas 13083–852, Campinas, Brazil E-mail: walmir@dsee.fee.unicamp.br

Biographical notes: Ahmed Faheem Zobaa received his BSc (Hons.), MSc and PhD degrees in Electrical Power and Machines from the Faculty of Engineering at Cairo University, Giza, Egypt, in 1992, 1997 and 2002, respectively. Currently, he is an Assistant Professor in the Department of Electrical Power and Machines, at the Faculty of Engineering, Cairo University. He was an Instructor in the Department of Electrical Power and Machines with the Faculty of Engineering at Cairo University from 1992 to 1997 and Teaching Assistant from 1997 to 2002. His areas of research include harmonics, compensation of reactive power, power quality, photovoltaics, wind energy, education and distance learning. He is an editorial board member for *Electric Power Components and Systems Journal, International Journal of Emerging Electric Power Systems, International Journal of Computational Intelligence and WSEAS Transactions on Power Systems.* He is an Editor for *IEEE Power Engineering Letters* and *IEEE Transactions on Energy Conversion*.

Copyright © 2007 Inderscience Enterprises Ltd.

392 A.F. Zobaa, E.N. Asada, R. Romero and W. Freitas

Also, he is an Associate Editor for *IEEE Transactions on Industrial Electronics, Electrical Power Quality and Utilization Journal, International Journal of Power and Energy Systems, International Journal on Modelling and Simulation, International Journal of Energy Technology and Policy,* and *Neurocomputing Journal.* He is a member of the IEEE Power Engineering/Industry Applications/Industrial Electronics/Power Electronics Societies, Institution of Electrical Engineers, the International Association of Science and Technology for Development and the International Solar Energy Society.

Eduardo N. Asada received his PhD degree in Electrical Engineering from the State University of Campinas, Brazil, in 2004. From 2004 to 2006, he was a Post-Doctoral Fellow at the University of Campinas. At present, he is an Assistant Professor at the Engineering School of São Carlos, University of São Paulo, Brazil. His areas of research are intelligent systems applied to power systems, real-time operation and planning.

Rubén Romero received his BS degree in 1978 and PE degree in 1984 from the National University of Engineering in Lima, Peru, and his MS and PhD degrees from the University of Campinas, UNICAMP, Brazil in 1990 and 1993, respectively, all in Electrical Engineering. Currently, he is a Professor of Electrical Engineering at FEIS-UNESP in Ilha Solteira, Brazil. His areas of research are meta-heuristics applied in power systems, network expansion planning, and operation and planning in distribution systems.

Walmir Freitas received his PhD degree in Electrical Engineering from the State University of Campinas, Brazil, in 2001. From 2002 to 2003, he was a Post-Doctoral Fellow at the University of Alberta, Canada. At present, he is an Assistant Professor at the State University of Campinas, Brazil. His areas of research are power system stability and control and distributed generation.

Nowadays, power system operation has become more complex owing to the critical operation conditions necessitated by the highly competitive behaviour of power system market operations. In this context, efficient methods for optimisation of power system operation and planning become critical to satisfying operational (technical) and financial demands. Therefore, the detailed analysis of modern optimisation techniques, as well as its application to the resolution of power system problems, represents a relevant issue from the scientific and technology point of view.

The objective of the special issue is to provide a means for the publication and interchange of information, on an international basis, on all aspects of mathematical optimisation methods applied to network operation and planning, from theoretical and practical terms.