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- C 15- El-Hawary, M.E., " Optimum Hydro-thermal Electric Energy System Scheduling Challenges and Opportunities in Research and Development in Canada", Proceedings of the 92nd EIC Annual Conference, 1978.
- C 14- El-Hawary, M.E., and Christensen, G.S., " Economic Dispatch of General Hydrothermal Electric Power Systems", CEA Engineering and Operating Division Meeting, Toronto, 1978.
- C 13- El-Hawary, M.E., Wellon, O.K., and Hamilton, P. R." The Modified Quasi-Second Order Newton-Raphson Method for Load Flow Solutions", International Electrical and Electronics Conference, IEEE Canadian Region, Toronto, 1977
- C 12- El-Hawary, M.E., and Christensen, G.S., "Realistic Optimal Load Flow in Hydrothermal Electric Power Systems", International Electrical and Electronics Conference, IEEE Canadian Region, Toronto, 1977
- C 11- Shamaly, A., Christensen, G.S., and El-Hawary, M.E., "Functional Optimization of Systems with Polynomial Nonlinearities", Proceedings of the 20th Mid-West Symposium on Circuits and Systems, Lubbock, Texas, 1977.
- C 10- EI-Hawary, M.E., and Christensen, G.S., " Optimal Active-Reactive Dispatch in Power Systems: Realistic Hydro Model", Proceedings of IFAC Multi-variable Technological Systems Symposium, Fredericton, N.B., 1977.
- C 9- El-Hawary, M.E., and Christensen, G.S., " Optimum Operation of Power Systems with Realistic Hydro Representations", Proceedings of Optimization Days, 1977.
- C 8- Kelly, D. H. and El-Hawary, M.E., "Numerical Minimization Methods", CEA Engineering and Operations Spring Meeting, Montreal, 1977
- C 7- El-Hawary, M.E., and Christensen, G.S., " Optimal Load Flow in General Multichain Hydro-thermal Electric Power System" IEEE Canadian Conference on Communications and Power, Montreal, 1976.
- C 6- El-Hawary, M.E., and Christensen, G.S., "Active and Reactive Dispatch in Multi-Chain Hydro-thermal Systems", Third Computers, Electronics, and Control International Symposium, Calgary, 1976.
- C 5- El-Hawary, M.E., and Christensen, G.S., " Optimum Operation of a Large Scale Power System", Optimization Days, McGill University, IEEE, and SIAM, 1976.
- C 4- El-Hawary, M.E., and Christensen, G.S., " A Minimum Norm Approach to Optimal Load Flow in Hydro-Thermal Power Systems", International Electrical and Electronics Conference, IEEE Canadian Region, Toronto, 1975
- C 3- El-Hawary, M.E., and Christensen, G.S., "Functional Optimization of Hydrothermal Systems with Trapezoidal Reservoirs and Variable Efficiency", Paper C 73- 4504, IEEE Summer Power Meeting, Vancouver, 1973
- C 2- El-Hawary, M.E., and Christensen, G.S., "Functional Optimization of Electric Power Systems with Variable Head Hydro-Plants", Third Southeastern Symposium on System Theory, Georgia Institute of Technology, Atlanta, GA, 1971
- C 1- El-Hawary, M.E., and Christensen, G.S., "Optimization of Hydro-Thermal Generation Schedules Using Functional Analysis", Second Southeastern Symposium on System Theory, University of Florida, Gainesville, Florida, 1970.

#### THESES SUPERVISED

TH 62- Bader M. Alluhaidah "Most Influential Variables for Solar Radiation Forecasting Using Artificial Neural Networks" Master of Applied Science at Dalhousie University Halifax, Nova Scotia June 2014

TH 61- Fawaz Masoud Alhaddad "Optimal Filter Placement and Sizing Using Ant Colony Optimization in Electrical Distribution System" Master of Applied Science Dalhousie University Halifax, Nova Scotia May 2014

TH 60- Mohamed Darfoun "Optimal "Distributed Generation Sizing and Placement Via Singleand Multi-Objective Optimization Approaches" Dalhousie University Halifax, Nova Scotia July 2013

TH 59- Wayel Khaled "Applying A PV Grid-Tied System in Industrial Sector With Payback Reduction: A Case Study In K.S.A. " Master of Applied Science at Dalhousie University Halifax, Nova Scotia April 2013

TH 58- Maher Ali Alharbi "Daily Global Solar Radiation Forecasting Using ANN and Extreme Learning Machine: A Case Study in Saudi Arabia" Dalhousie University Halifax, Nova Scotia March 2013

TH 57- Abobkr Hamdia Abobkr "Fault Ride-Through Capability of Doubly-Fed Induction Generators Based Wind Turbines" Dalhousie University Halifax, Nova Scotia March 2013

TH 56- Hossam Mosbah "State Estimation in Electrical Networks "Dalhousie University Halifax, Nova Scotia January 2013

TH 55- Bandar Hamdi Mutwali "An Economic Analysis of Grid-tie Residential Photovoltaic System and Oil Barrel Price Forecasting: A Case Study of Saudi Arabia " Dalhousie University Halifax, Nova Scotia January 2013

TH 54- Hamed H. Aly "FORECASTING, MODELING, AND CONTROL OF TIDAL CURRENTS ELECTRICAL ENERGY SYSTEMS" Doctor of Philosophy at Dalhousie University Halifax, Nova Scotia December 2012

TH 53- Ibrahim A. Farhat "Economic and Economic-Emission Operation of All-Thermal and Hydro-Thermal Power Generation Systems Using Bacterial Foraging Optimization" Doctor of Philosophy at Dalhousie University Halifax, Nova Scotia March 2012

TH 52- Fahad Saad Abu-Mouti "OPTIMAL ECONOMIC AND ENVIRONMENTAL OPERATION OF ELECTRIC POWER SYSTEMS VIA MODERN META-HEURISTIC OPTIMIZATION ALGORITHMS" Doctor of Philosophy at Dalhousie University Halifax, Nova Scotia December 2011

TH 51 Yousef M. K. Ali, Forecasting Power and Wind Speed using Artificial and Wavelet Neural Networks for Prince Edward Island (PEI), Master of Applied Science Dalhousie University, March 2010

TH 50- Mohammed H. Al-Shakhs "DAY- AHEAD MARGINAL PRICE FORECASTING OF ELECTRIC POWER SPOT MARKET USING INNOVATED FORECASTING APPROACHES" Master of Applied Science at Dalhousie University Halifax, Nova Scotia March 2011 TH 49- Alhajri, M., "Sizing and Placement of Distributed Generation in Electrical Distribution Systems Using Conventional and Heuristic Optimization Methods" Ph. D. Dalhousie University, 2009

TH 48- Almarghani, Abdelbaset, Harmonic Reduction in Multilevel Converters, M. A. Sc. Thesis, Dalhousie University, 2009

TH 47- El-Keshet, Adel, New Developments Using ANFIS for DC Motors Speed Control M. A. Sc. Thesis, Dalhousie University, 2009

TH 46- Milad, Houssen , Optimal Size and Location of Shunt Capacitor on Distribution Feeders Using the Reduction of PPL and EL, M. A. Sc. Thesis, Dalhousie University, 2008

TH 45- Fahad Saad Abu-Mouti, "Radial Distribution Feeders Compensation using Distributed Generation", M. A. Sc. Thesis, Dalhousie University, 2008

TH 44- Abdelsalam Eajal "Optimal Capacitor Placement and Sizing in Unbalanced Distribution Systems with Harmonics Consideration using PSO", M. A. Sc. Thesis, Dalhousie University, 2008

TH 43- Mohammed AlRashidi, "Improved Optimal Economic and Environmental Operations of Power Systems using Particle Swarm Optimization" Ph. D. Thesis, Dalhousie University, 2007

TH 42- Ahmed I El-Gallad, "New Innovations in Swarm Optimization via Multi Criterion Decision Making" Ph. D. Thesis, Dalhousie University, 2007

TH 41- Jian Huang, "System Engineering and Data Management for Structural Health Monitoring," M. A. Sc. Thesis, Dalhousie University 2007.

TH 40- Yuning Chen, A Novel Thyristor- Controlled Braking Resistor Approach for Transient Stability Augmentation and its Modeling, M. A. Sc. Thesis, Dalhousie University, 2006

TH 39- Jamal Yousif Madouh, "Application of Fuzzy Systems to Model Economic Operations of Power Systems", Ph. D. Thesis, Dalhousie University, 2005

TH 38- Shahdokht Zohraby, "Capacitor Allocation in Distribution Systems using Fuzzy Techniques", M. Eng. M Dalhousie University, 2004.

TH 37- Moussa Ali Hamdan, "A Genetic Algorithm Approach for Constrained Multicast Routing in Computer Networks", Ph. D. Thesis, Dalhousie University, 2004

TH 36- Rukmi Sari Hartati, "Active Security Constrained Optimal Power Flow using Modified Hopfield Neural Network", Ph. D. Thesis, Dalhousie University, 2001

TH 35- Ahmad Mohammad Al-Kandari, "Fuzzy System Applications for Short-Term Electric Load Forecasting", Ph. D. Thesis, Dalhousie University, 2001

TH 34- Anant Oonsivilai, "Load Modeling and Forecasting Via Wavelet and Fuzzy Neural Networks", Ph. D. Thesis, Dalhousie University, 2000

TH 33- Abdel Monem A. Abbas, Integrated System for Transient Stability Evaluation and Emergency Control of Synchronous Generators", Ph. D. Thesis, Ain-Shams University, Cairo, Egypt, 2000

TH 32- Zidan A. Bashir, "Short-Term Load Forecasting by Using Neural and Wavelet Neural Networks", M. A. Sc. Thesis, Dalhousie University, 2000

TH 31- Abdul-Jalil Mohamed, "A New Self-Organizing Approach for Congestion Control in ATM Networks", M. A. Sc. Thesis, Dalhousie University, 1999

RP 30- Jessome, Doanald, " A Competitive Electricity Market-Based Simulation at Nova Scotia Power Inc.", Research Project for the degree of MBA, Saint Mary's University, 1999

TH 29- Muchayi, Maxwell "Transmission Consideration-based Electrical Rates using Optimal Pwer Flows", Ph. D. Thesis, DalTech, Dalhousie University, 1999

TH 28- Smeda, Adel Abdullah, "Application of Hopfield Neural Network in Routing for Computer Networks, M. A. Sc. Thesis, DalTech, Dalhousie University, 1999

TH 27- Dondo, Maxwell Govero, "Real Time Electricity Pricing in a Deregulated Environment using Artificial Intelligence ", Ph. D. Thesis, DalTech, Dalhousie University, 1998

TH 26- Yuang Jing, "Application of Robust Kalman Filtering to Underwater Target Tracking", Ph. D. Thesis, TUNS, August 1996, (Joint with Ferial El-Hawary)

TH 25- Saeed Seyed Tabaii, "Advanced Topics in Control: Autonomous Underwater Vehicle Case of Study", Ph. D. Thesis, TUNS, May 1995, (Joint with Ferial El-Hawary)

TH 24- Mahmoud A. E. Mostafa, "Frequency Estimation & Optimal Load Shedding for Electric Power Systems", Ph. D. Thesis, Ain-Shams University, Cairo, Egypt, 1995

TH 23- J. Li, "Neural Network and Linear Prediction for Underwater Signal Estimation", M. A. Sc. Thesis, TUNS, March 1995, (Joint with Ferial El-Hawary)

TH 22- Seyed Setayeshi, "Underwater Signal Modelling for Subsurface Classification using Computational Intelligence", Ph. D. Thesis, TUNS, March 1995, (Joint with Ferial El-Hawary)

TH 21- Tessa Denise King, "Optimal Environmental Dispatching of Thermal Generating Units using a New Hopfield Model", M. A. Sc., TUNS, April 1994.

TH 20- Maxwell G. Dondo, "Real-Time Optimal Electricity Rate Structure", M. A. Sc., TUNS, April 1994.

TH 19- Jaspal Singh Wadhwa, "Pollution Based Environmental Dispatching of Electric Power Systems Recognizing Dispersion Models", M. A. Sc., TUNS, April 1994.

TH 18- Weiming Zhang, "An Artificial Neural Network Controller for Synchronous Machine Exciters", M. A. Sc., TUNS, March 1994.

TH 17- Setayeshi, S., "A Neural Network Based Signal Peak Recognition for Underwater Layered Media Identification:, M. A. Sc., TUNS, November 1993.

TH 16- Talaq, J. H., "Computational Aspects of Optimal Environmental Operation of Electric Power Systems", Ph.D. Thesis, TUNS, September 1992.

TH 15- Dias, L.G., "Incorporation of Load Models in Optimal Power Flow Studies", Ph.D. Thesis, TUNS, November 1990.

TH 14- Mbamalu, G.A.N., "Hydro-Thermal Stochastic Optimal Power Dispatch : An Optimal Power Flow Approach", Ph.D. Thesis, TUNS, August 1989.

TH 13- Ravindranath, K.M., " Different Formulations and Their Comparative Study in the Hydro-Thermal Optimal Power Flow Problem", Ph.D. Thesis, TUNS, August 1989.

TH 12- Ibrahim, Said T., " Load Flow and Optimal Load Flow in Large AC/DC Electric Power Systems", M. A. Sc., TUNS, April 1989.

TH 11- Richards. Troy C., " Parallel Architectures for Power Spectral Density Estimation", M. A. Sc., TUNS, July 1988

TH 10- Mbamalu, George A.N., " Stochastic Economic Operation of An All Thermal Electric Energy System Using the Optimal Load Flow", M. A. Sc., TUNS, July 1985

TH 9- Dias, L.G., "Load Modelling and Incorporation in Load Flow Studies", M. A. Sc. Thesis, TUNS, January 1985.

TH 8- Ravindranath, K.M., "Effects of Hydro Models on Optimal Economic Operation of Thermal and Variable Head Hydro Plant System", M. A. Sc. Thesis, TUNS, April 1984.

TH 7- Tsang, D.H.K., "Optimal Load Flow for Hydro-thermal Electric Power Systems with Fixed Head Hydro Plants", M. A. Sc. Thesis, TUNS, January 1984.

TH 6- Kumar, M., "Hydro and Thermal Plant Modelling for Optimal Operation of Electric Power Systems", M. A. Sc. Thesis, TUNS, October 1983.

TH 5- Singh, B. N., "An Investigation of AC/DC Load Flow Analysis Using Newton's Method and Extensions", M. Eng. Thesis, Memorial University of Newfoundland, October 1983.

TH 4- Walsh, K. P.," Economic Operation of Variable Head Hydro Thermal Electric Power Systems Using Newton's Method", M. Eng. Thesis, Memorial University of Newfoundland, 1982.

TH 3- Mansour, S. Y., "Parameter Estimation and Optimization for Active and Active-Reactive Dispatch in Electric Power Systems", M. Eng. Thesis, Memorial University of Newfoundland, December 1979.

TH 2- Wellon, O.K.," The Alpha-Modified Quasi-Second Order Newton-Raphson Method for Load Flow Solutions in Rectangular Form", M. Eng. Thesis, Memorial University of Newfoundland, April 1979.

TH 1- Falcao, D. M.," Operacao Economica De Sistemas Hidrotermicos de Potencia", M. Sc., Graduate School of Engineering, Federal University of Rio de Janeiro, December 1973.