


REFERENCES

- [1] L. Zhou, F. Y. Xu, and Y. N. Ma, "Impact of smart metering on energy efficiency," in *Proc. 2010 IEEE Machine Learning and Cybernetics Conf.*, pp. 3213-3218.
- [2] S. S. S. R. Depuru, L. Wang, V. Devabhaktuni, and N. Gudi, "Smart meters for power grid – challenges, issues, advantages and status," in *Proc. 2011 IEEE Power Systems Conference and Exposition.*, pp. 1-7.
- [3] F. Y. Xu, L. Zhou, Y. L. Wu, and Y. Ma, "Standards, Policies and Case studies in smart metering," in *Proc. 2010 IEEE Power and Energy Society General Meeting.*, pp. 1-5.
- [4] "Smart Metering-Enabling Greater Energy Efficiency," [Online]. Available: enterprise.alcatel-lucent.com/...docs/SmartMetering_wp_092107.pdf.
- [5] "Smart meter," [Online]. Available: http://en.wikipedia.org/wiki/Smart_meter.
- [6] F. Derbel, "Trends in smart metering," in *Proc. 2009 IEEE Systems, Signals and Devices Conf.*, pp. 1-4.
- [7] T. S. Choi, K. R. Ko, S. C. Park, Y. S. Jang, Y. T. Yoon, and S. K. Im, "Analysis of energy savings using smart metering system and in-home display," in *Proc. 2009 IEEE Transmission and Distribution Conf.*, pp. 1-4.
- [8] M. Jahn, M. Jentsch, C. R. Prause, F. Pramudianto, A. A. Akkad, and R. Reiners, "The energy aware home," in *Proc. 2010 IEEE Future Information Technology Conf.*, pp. 1-8.
- [9] M. Popa, H. Ciocarlie, A. S. Popa, and M. B. Racz, "Smart metering for monitoring domestic utilities," in *Proc. 2010 IEEE Intelligent Engineering Systems Conf.*, pp. 55-60.
- [10] "ADE7758: Poly Phase Multifunction Energy Metering IC with Per Phase Information," [Online]. Available: <http://www.analog.com/en/analog-to-digital-converters/energy-measurement/ade7758/products/product.html>.
- [11] "Microchip 18F452 data Sheet," [Online]. Available: ww1.microchip.com/downloads/en/devicedoc/39564c.pdf.
- [12] "Sim 900 reference Design Guide," [Online]. Available: wm.sim.com/Sim/News/photo/2010222155735.pdf.
- [13] L. Zou, S. Chu, and Biao Guo, "The design of prepayment polyphase smart electricity meter system," in *Proc. 2010 IEEE Intelligent Computing and Integrated Systems Conf.*, pp. 430-432.

- [14] I. Paranhos, F. Libano, J. Melchioris, O. Mano, R. Fehlberg, R. Braga, and S. Muller, "Power energy meter in a low cost hardware/software," in *Proc. 2007 IEEE Power Electronics and Applications Conf.*, pp. 1-9.
- [15] S. W. Luan, J. H. Teng, S. Y. Chan, and L. C. Hwang, "Development of a smart power meter for AMI based on ZigBee communication," in *Proc. 2009 IEEE Power Electronics and Drive Systems Conf.*, pp. 661-665.
- [16] C. F. Norman, Tse, Y. C. John, C. Chan, and L. L. Lai, "Development of a smart metering scheme for building smart grid system," in *Proc. 2009 IEEE Advances in Power System Control Operation and Management Conf.*, pp. 1-5.
- [17] B. S. Koay, S. S. Cheah, Y. H. Sng, P. H. J. Chong, P. Shum, Y. C. Tong, X. Y. Wang, Y. X. Zuo, and H. W. Kuek, "Design and implementation of Bluetooth energy meter," in *Proc. 2003 ICIC-PCMConf.*, pp. 1474-1477.
- [18] S. Rusitschka, C. Gerdes, and K. Eger, "A low-cost alternative to smart metering infrastructure based on peer-to-peer technologies," in *Proc. 2009 IEEE Energy Market Conf.*, pp. 1-6.
- [19] F. Derbel, "Smart metering based on automated meter reading," in *Proc. 2008 IEEE Systems, Signals and Devices Conf.*, pp. 1-2.
- [20] L. W. Xuan, and W. X. Yi, "The research of AMR in smart meter," in *Proc. 2010 IEEE Power and Energy Conf.*, pp. 1-4.
- [21] P. Bharath, N. Ananth, S. Vijetha, and K. V. J. Prakash, "Wireless automated digital energy meter," in *Proc. 2008 IEEE Sustainable Energy Technologies Conf.*, pp. 564-567.
- [22] Abdollahi, A. Dehghani, and M. Zamanzadeh, "SMS-based Reconfigurable Automatic Meter Reading System," in *Proc. 2007 IEEE Control Applications Conf.*, pp. 1103-1107.
- [23] M. Popa, "Data collecting from smart meters in an advanced metering infrastructure," in *Proc. 2011 IEEE Intelligent Engineering Systems Conf.*, pp. 137-142.
- [24] B. X. Min, M. J. Xia, and Z. N. Hui, "Functional Analysis of Advanced Metering Infrastructure in Smart Grid," in *Proc. 2010 IEEE Power System Technology Conf.*, pp. 1-4.
- [25] Amin S. Mehmood, T. Choudhry, and M. A. Hanif, "Reviewing the Technical Issues for the Effective Construction of Automatic Meter Reading System," in *Proc. 2005 IEEE Microelectronics Conf.*, pp. 189-193.
- [26] S. Jeyashanker, A. Karthikeyan, M. A. C. Karunarathne and S. Sudarsan, "Development of a three period time-of-day electricity tariff for Sri Lanka," [Online]. Available : www.elect.mrt.ac.lk/ug_papers/p09_apr04.pdf.

- [27] “Curve Fitting,” [Online]. Available: http://en.wikipedia.org/wiki/Curve_fitting.
- [28] “Extrapolation,” [Online]. Available: <http://en.wikipedia.org/wiki/Extrapolation>.
- [29] “Interpolation,” [Online]. Available: <http://en.wikipedia.org/wiki/Interpolation>.
- [30] D. H. O. McQueen, R. H. Patrick, and S. J. Watson, “Monte Carlo simulation of residential Electricity demand for forecasting maximum demand on distribution networks,” *IEEE Trans. Power Systems*, vol. 19, pp 1685 - 1689, Aug. 2004.
- [31] I. A .B. W. A. Rasak, Md. S. B. Majid, H. Abd. Rahman, and M. Y. Hassan, “Short term load forecasting using data mining technique,” in *Proc.2008 IEEE Power and Energy Conf.*, pp.139-142.
- [32] A. Setiawan, I. Koprinska, and V. G. Agelidis, “Very short-term electricity load demand forecasting using support vector regression,” in *Proc. 2009 IEEE . Neural NetworksConf.*, pp. 2888-2894.
- [33] C. L. Hor, S. J. Watson, and S. Majithia, “ Daily load forecasting and maximum demand estimation using ARIMA and GARCH,” in *Proc. 2006 IEEE Probabilistic methods applied to power systems.*, pp. 1-6.
- [34]  A. D. Papalexopoulos, and T. G. Hesterberg, “A regression-based approach to short-term system load forecasting,” *IEEE Trans. Power Systems*, vol. 5, pp. 1535-1547, Nov. 1990.
- [35] S. Towill, “Estimation of maximum demand on a British electricity-board system (forecast periods of 1-3 years),” *IEEE Trans. Electrical Engineers*, vol. 121, pp 609 – 615, July.1974.
- [36] Y. Chen, P. B. Luh, C. Guan, Y. Zhao, L. D. Michel, M. A. Coolbeth, P. B. Friedland, and S. J. Rourke, “Short-term load forecasting: similar day-based wavelet neural networks,” *IEEE Trans. Power Systems*, vol. 25, pp. 322-330, Feb. 2010.
- [37] Y. Zhao, P. B. Luh, C. Bomgardner, and G. H. Beerel, “Short-term load forecasting: multi-level wavelet neural networks with holiday corrections,” in *Proc. 2009 IEEE Power and Energy Society General Meeting*, pp.1-7.
- [38] C. Guan, P. B. Luh, M. A. Coolbeth, Y. Zhao, L. D. Michel, Y. Chen, C. J. Manville, P. B. Friedland, and S. J. Rourke, “Very short-term load forecasting: multilevel wavelet neural networks with data pre-filtering,” in *Proc. 2009 IEEE Power and Energy Society General Meeting*, pp. 1-8 .
- [39] J. Deng, and P. Jirutitijaroen, “Short-term load forecasting using time series analysis: a case study for Singapore,” in *Proc .2010 IEEE Cybernetics and Intelligent Systems Conf.*, pp. 231-236.

- [40] D. De Silva, Y. Xinghuo, D. Alahakoon, and G. Holmes, "Semi-supervised classification of characterized patterns for demand forecasting using smart electricity meters," in *Proc. 2011 IEEE Electrical Machines and Systems Conf.*, pp. 1-6.
- [41] "Littelfuse- V180MA3B- Metal Oxide Varistor data Sheet," [Online]. Available: http://www.littelfuse.com/data/en/Data_Sheets/MA.pdf.
- [42] A. E. Emanuel, " Apparent and reactive powers in three-phase systems," in Search of a physical Meaning and a Better Resolution" ETEP Vol 3. No1. Jan/Feb 1993.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk