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11. References

- [1] MEMWE, "An overview of the energy sector in Morocco", Ministry of energy, Mines, Water and Environment, Morocco, 2013.
- [2] G. Escribano-Frances, and E. S. M. Gonzalez, "Morocco, the European energy policy: an environmental approach", ed. F. Morata, I.Solorio Sandoval, pp. 193-210, 2012.
- [3] ONEE, "Rapport Annuel 2011", Office National de L'Electricité et de l'Eau Potable, Morocco, 2011.
- [4] C. C. cîrlig, "Solar energy development in Morocco", Library Briefing: Library of the European Parliament, 2013.
- [5] H. Farhangi, "The Path of the Smart Grid", IEEE Pwer & Energy Magazine, Vol. 8, pp. 18-28, 2010.
- [6] IRENA, "Renewable energy country profile: Morocco", International Renewable Energy Agency, European Union, 2010.
- [7] ADEREE, "Programme d'efficacité énergétique", National Agency for the Development of Renewable Energy and Energy Efficiency, Morocco, 2009.
- [8] S. Makonin, F. Popowich and B. Gill, The cognitive power meter: looking beyond the smart meter. In CCECE '26, pages 1-6. IEEE, 2013.
- [9] S. Aman, Y.Simmhan and V.K. Prasanna, Energy management systems: state of the art and emerging trends. IEEE Communications Magazine, pp. 114-119, 2013.
- [10] ARNT, "Etude sur l'usage des Technologies de l'Information et de Communication au Maroc", Agence Nationale de Réglementation des Télécommunications, Morocco, 2012.
- [11] Barbarto, A. Capone, M. Delfani, M. Merlo, and A. Zaminga, House energy demand optimization in single and multi-user scenarios. In SmartGridComm '11, pp. 345-350, 2011.
- [12] X. Jiang, S. Dawson-Haggerty, P. Dutta and D. Culler, Design and implementation of a high-fidelity AC metering network. In IPSN '09, pp. 253-264. IEEE, 2009.
- [13] N. Bressan, L. Bazzaco, N. Bui, P. Casari, L. Vangelista and M. Zorzi, The Deployment of a Smart Monitoring System using Wireless Sensors and Actuators Networks. In SmartGridComm '10, pp. 49-54. IEEE, 2010.
- [14] X. Fang, S. Misra, G. Xue, and D. Yang, Smart grid – the new and improved power grid: A survey. IEEE Communications Surveys and Tutorials (COMST), 14, pp. 944-980, 2012.
- [15] S. Squartini, M. Boaro, F. De Angelis, D. Fuselli, and F. Piazza, Optimization algorithms for home energy resource scheduling in presence of data uncertainty. In ICICIP '4, pp. 323-328. IEEE, 2013.
- [16] H. Morais, P. Kadar P. Faria, Z.A. Vale, and H. M. Khodr, Optimal scheduling of a renewable micro-grid in an isolated load area using mixed-integer linear programming. Renewable Energy - An International Journal, Vol 35, issue 1, pages: 151-156, 2009.
- [17] N. Gudi, L. Wang, V. Devabhaktuni, and S.S.S.R.Depuru, A Demand-Side Management Simulation Platform Incorporating Optimal Management of Distributed Renewable Resources. Proceedings of Power Systems Conference and Exposition (PSCE), pp.1-7, 2011.
- [18] D. Fuselli, F. De Angelis, M. Boaro, D. Liu, Q. Wei, S. Squartini, and F. Piazza, Optimal Battery Management with ADHDP in Smart Home Environments. Advances in Neural Networks - ISNN 2012, LNCS Springer, Vol 7368, 2012.
- [19] R. H. Liang, and J. H. Liao, A Fuzzy-Optimization Approach for Generation Scheduling with Wind and Solar Energy Systems. IEEE Transactions on Power Systems, Vol 22, Issue 4, pp. 1665-1674, 2007.
- [20] C.M. Colson, M.H. Nehrir, and C. Wang, Ant colony optimization for microgrid multi-objective power management. IEEE, Electrical and Computer Engineering Department, Montana State University, Bozeman, MT, USA, 2009.