

## REFERENCES

- A.J. Wood, B. F. W. (1996). *Power generation, operation and control*. New York: John Wiley and Sons.
- Abido, M. A. (2001). A New Multiobjective Evolutionary Algorithm for Environmental / Economic Power Dispatch. *Constraints*, 00(C), 1263–1268.
- Abido, M. a. (2009). Multiobjective particle swarm optimization for environmental/economic dispatch problem. *Electric Power Systems Research*, 79(7), 1105–1113. <http://doi.org/10.1016/j.epsr.2009.02.005>
- Alrashidi, M. R. (2008). Impact of Loading Conditions on the Emission- Economic Dispatch, 2(3), 133–136.
- Aydin, D., Özyön, S., Yaşar, C., & Liao, T. (2014). Artificial bee colony algorithm with dynamic population size to combined economic and emission dispatch problem. *International Journal of Electrical Power & Energy Systems*, 54, 144–153. <http://doi.org/10.1016/j.ijepes.2013.06.020>
- Balamurugan, R., & Subramanian, S. (2007). A Simplified Recursive Approach to Combined Economic Emission Dispatch. *Electric Power Components and Systems*, 36(1), 17–27. <http://doi.org/10.1080/15325000701473742>
- Balamurugan, R., & Subramanian, S. (2008). An Improved Dynamic Programming Approach to Economic Power Dispatch with Generator Constraints and Transmission Losses. *Journal of Electrical Engineering & Technology*, 3(3), 320–330.
- Basu, M. (2005). A simulated annealing-based goal-attainment method for economic emission load dispatch of fixed head hydrothermal power systems. *International Journal of Electrical Power and Energy Systems*, 27(2), 147–153. <http://doi.org/10.1016/j.ijepes.2004.09.004>
- Basu, M. (2011a). Economic environmental dispatch using multi-objective differential evolution. *Applied Soft Computing Journal*, 11(2), 2845–2853. <http://doi.org/10.1016/j.asoc.2010.11.014>
- Basu, M. (2011b). Economic environmental dispatch using multi-objective differential evolution. *Applied Soft Computing Journal*. <http://doi.org/10.1016/j.asoc.2010.11.014>
- Bhattacharya, A., & Chattopadhyay, P. K. (2011). Solving economic emission load dispatch problems using hybrid differential evolution. *Applied Soft Computing Journal*, 11(2), 2526–2537. <http://doi.org/10.1016/j.asoc.2010.09.008>
- Brodsky, S. F. J., & Hahn, R. W. (1986). Assessing the Influence of Power Pools on Emission Constrained Economic Dispatch. *IEEE Power Engineering Review*, PER-6(2), 30–31.
- Chowdhury, B. H., & Rahman, S. (1990). A review of recent advances in economic dispatch. *Power Systems, IEEE Transactions on*, 5(4), 1248–1259. <http://doi.org/10.1109/59.99376>
- Deb, K., Pratap, A., Agarwal, S., & Meyarivan, T. (2002). A fast and elitist

- multiobjective genetic algorithm: NSGA-II. *IEEE Transactions on Evolutionary Computation*, 6(2), 182–197. <http://doi.org/10.1109/4235.996017>
- Dhanalakshmi, S., Kannan, S., Mahadevan, K., & Baskar, S. (2011). Application of modified NSGA-II algorithm to Combined Economic and Emission Dispatch problem. *International Journal of Electrical Power and Energy Systems*, 33(4), 992–1002. <http://doi.org/10.1016/j.ijepes.2011.01.014>
- Dos Santos Coelho, L., & Viviana Cocco, M. (2006). Combining of chaotic differential evolution and quadratic programming for economic dispatch optimization with valve-point effect. *IEEE Transactions on Power Systems*, 21(2), 989–996. <http://doi.org/10.1109/TPWRS.2006.873410>
- Dubey, H. M., Pandit, M., & Panigrahi, B. K. (2015). A Biologically Inspired Modified Flower Pollination Algorithm for Solving Economic Dispatch Problems in Modern Power Systems. *Cognitive Computation*. <http://doi.org/10.1007/s12559-015-9324-1>
- Emmanuel Dartey Manteaw, D. N. A. O. (2012). Combined Economic and Emission Dispatch Solution Using ABC\_PSO Hybrid Algorithm with Valve Point Loading Effect. *International Journal of Scientific and Research Publications*, 2(12).
- Farag, A., Al-Baiyat, S., & Cheng, T. C. (1995). C2\_N023FN\_20130909\_SLP2014\_Handbook.pdf. *Power Systems, IEEE Transactions on*, 10(2), 731–738. Retrieved from [http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=387910](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=387910)
- Gent, M. R., & Lamont, J. W. (1972). Minimum-emission dispatch. *IEEE Transactions on Power Apparatus and Systems*, PAS-90(6), 2650–2660. <http://doi.org/10.1109/TPAS.1971.292918>
- Gnanadass, R., Padhy, N. P., & Manivannan, K. (2004). Assessment of available transfer capability for practical power systems with combined economic emission dispatch. *Electric Power Systems Research*, 69(2-3), 267–276. <http://doi.org/10.1016/j.epsr.2003.10.007>
- Guvenc, U. (2010). Combined economic emission dispatch solution using genetic algorithm based on similarity crossover. *Scientific Research and Essays*, 5(17), 2451–2456. Retrieved from <http://www.academicjournals.org/sre/PDF/pdf2010/4Sep/Guvenc.pdf>
- Güvenç, U., Sönmez, Y., Duman, S., & Yörükeren, N. (2012). Combined economic and emission dispatch solution using gravitational search algorithm. *Scientia Iranica*, 19(6), 1754–1762. <http://doi.org/10.1016/j.scient.2012.02.030>
- Happ, H. H. (1977). Optimal Power Dispatch-A C Comprehensive Survey. *Transactions on Power Apparatus and System*, PAS-96(3). <http://doi.org/10.1109/T-PAS.1977.32397>
- Hassan, D. M. Y. (2007). *Power system control* (2nd ed.). Universiti Teknologi Malaysia: Dekstop Publisher.
- Hsiao, Y. T., Chiang, H. D., Liu, C. C., & Chen, Y. L. (1994). Computer package for optimal multi-objective VAR planning in large scale power systems. *IEEE Transactions on Power Systems*, 9(2), 668–676. <http://doi.org/10.1109/59.317676>
- Kaushal, R. K., & Ahamad, I. (2015). Study On Combined Economic-Emission

- Dispatch Of Thermal-Hydro Power Generation Systems, 07(01), 170–179.
- Keshmiri, S. N. (2011). Probabilistic Economic Dispatch Of Generation Units Considering Environmental Aspects. *ProQuest*.
- Kirchmayer L. K. (1958). *Economic operation of power systems* (99th ed.). Inc. New York: John Wiley and Sons.
- Kothari D. P. and Dhillon J. S. (2011). *Power System Optimization* (Second). PHI learning Private limited.
- Krishnamurthy, S., & Tzoneva, R. (2013). Investigation on the Impact of the Penalty Factors over Solution of the Dispatch Optimization Problem, 851–860.
- Kumar, N., Parmar, K. P. S., & Dahiya, S. (2012). Optimal Solution of Combined Economic Emission Load Dispatch using Genetic Algorithm. *International Journal of Computer Applications*, 48(15), 15–20. <http://doi.org/10.5120/7424-0410>
- Liang, Z.-X., & Glover, J. D. (1992). A zoom feature for a dynamic programming solution to economic dispatch including transmission losses. *Power Systems, IEEE Transactions on*, 7(2); applied during the iterative process in order to converge to the economic dispatch solution with low computer time and storage requirements, Dynamic programming including a short-term load forecast; briefly discussed. A three-generator example (TRUNCATED), 544–550. <http://doi.org/10.1109/59.141757>
- Lin, W., Cheng, F., & Tsay, M. (2002). An Improved Tabu Search for Economic Dispatch. *Power*, 17(1), 108–112. <http://doi.org/10.1109/59.982200>
- Lu, Y., Zhou, J., Qin, H., Wang, Y., & Zhang, Y. (2011). Environmental/economic dispatch problem of power system by using an enhanced multi-objective differential evolution algorithm. *Energy Conversion and Management*, 52(2), 1175–1183. <http://doi.org/10.1016/j.enconman.2010.09.012>
- Mishra, N., & Pandit, M. (2013). Economic Emission Dispatch Using Weighted Sum Based PSO with Fuzzy Decision Making.
- Park, J.-B., Lee, K.-S., Shin, J.-R., & Lee, K. Y. (2005). A Particle Swarm Optimization for Economic Dispatch With Nonsmooth Cost Functions. *IEEE Transactions on Power Systems*, 20(1), 34–42. <http://doi.org/10.1109/TPWRS.2004.831275>
- Pavlyukevich, I. (2007). Lévy Flight, non local search and simulated annealing. *J. Computational Physics*, 226, 1830–1844.
- R.Ramanathan. (1994). Emission Constrained Economic Dispatch, 9(4), 1994–2000.
- Rajasomashekar, S., & Aravindhababu, P. (2012). Biogeography based optimization technique for best compromise solution of economic emission dispatch. *Swarm and Evolutionary Computation*, 7, 47–57. <http://doi.org/10.1016/j.swevo.2012.06.001>
- Rajkumar M. (2014). Combined Economic Emission Dispatch Using Modified Multi-Objective Genetic Algorithm, (August).
- Ravi, G., Chakrabarti, R., & Choudhuri, S. (2006). Nonconvex Economic Dispatch with Heuristic Load Patterns Using Improved Fast Evolutionary Program. *Electric Power Components and Systems*, 34(1), 37–45.

<http://doi.org/10.1080/15325000691001430>

- Resek, J., Le, K. D., Golden, J. L., Stansberry, C. J., Vice, R. L., Wood, J. T., ... Cauley, G. W. (1995). Potential impacts of clean air regulations on system operations. *IEEE Transactions on Power Systems*, 10(2), 647–656. <http://doi.org/10.1109/59.387899>
- Serapião, A. B. S. (2013). Cuckoo Search for Solving Economic Dispatch Load Problem, 2013(November), 385–390.
- Singh, L., & Dhillon, J. S. (2009). Cardinal priority ranking based decision making for economic-emission dispatch problem. *Science And Technology*, 1(1), 272–282.
- Srinivasan, D., Chang, C. S., & Liew, A. C. (1994). Multiobjective generation scheduling using fuzzy optimal search technique. *IEE Proceedings - Generation, Transmission and Distribution*, 141(3), 233. <http://doi.org/10.1049/ip-gtd:19949943>
- Srinivasan, D., & Tettamanzi, A. G. B. (1997). An evolutionary algorithm for evaluation of emission compliance options in view of the Clean Air Act Amendments. *Power Systems, IEEE Transactions on*, 12(1), 336–341. <http://doi.org/10.1109/59.574956>
- Sulaiman, M. H. (2013). An Application of Differential Search Algorithm in Solving Non-Convex Economic Dispatch Problems with Valve-Point Effects. *International Review on Modelling and Simulations (IREMOS)*, 6(5).
- Talaq, J. H., Ferial, & El-Hawary, M. E. (1994). Summary of environmental/economic dispatch algorithms. *IEEE Transactions on Power Systems*, 9(3), 1508–1516. <http://doi.org/10.1109/59.336110>
- Thakur, T., Sem, K., Saini, S., & Sharma, S. (2006). A Particle swarm optimization solution to NO<sub>2</sub> and SO<sub>2</sub> emissions for environmentally constrained economic dispatch problem. *2006 IEEE PES Transmission and Distribution Conference and Exposition: Latin America, TDC'06*, 00. <http://doi.org/10.1109/TDCLA.2006.311399>
- Thi, N., Thao, P., & Thang, N. T. (2014). Environmental Economic Load Dispatch with Quadratic Fuel Cost Function Using Cuckoo Search Algorithm, 7(2), 199–210.
- Venkatesh, P., Gnanadass, R., & Padhy, N. P. (2003). Comparison and application of evolutionary programming techniques to combined economic emission dispatch with line flow constraints. *IEEE Transactions on Power Systems*, 18(2), 688–697. <http://doi.org/10.1109/TPWRS.2003.811008>
- Walters, D. C., & Sheble, G. B. (1993). Genetic algorithm solution of economic dispatch with valve point loading. *IEEE Transactions on Power Systems*, 8(3), 1325–1332. <http://doi.org/10.1109/59.260861>
- Wong, K. P., & Fung, C. C. (1993). Simulated annealing based economic dispatch algorithm. *Generation, Transmission and Distribution ...*, 140(6), 509. <http://doi.org/10.1049/ip-c.1993.0074>
- Wong, L. I., Sulaiman, M. H., Mohamed, M. R., & Hong, M. S. (2014). Grey Wolf Optimizer for Solving Economic Dispatch Problems, (1), 150–154.
- Wood A. J. and Wollenberg B. F. (1996). *Power generation, operation and control* (2nd

ed.). Inc. New York, USA: John Wiley and Sons Ltd.

- Wu, L. H., Wang, Y. N., Yuan, X. F., & Zhou, S. W. (2010). Environmental/economic power dispatch problem using multi-objective differential evolution algorithm. *Electric Power Systems Research*, 80(9), 1171–1181. <http://doi.org/10.1016/j.epsr.2010.03.010>
- Xin-She, Y. (2012). Flower Pollination Algorithm for Global Optimization. *Unconventional Computation and Natural Computation*, 7445, 240–249.
- Yalçınöz, T., & Altun, H. (n.d.). Environmentally Constrained Economic Dispatch Via Neural Networks. *Simulation*, (x).
- Yang, H. T., Yang, P. C., & Huang, C. L. (1996). Evolutionary programming based economic dispatch for units with non-smooth fuel cost functions. *IEEE Transactions on Power Systems*, 11(1), 112–118. <http://doi.org/10.1109/59.485992>
- Yang, X. S., Hosseini, S. S. S., & Gandomi, A. H. (2012). Firefly Algorithm for solving non-convex economic dispatch problems with valve loading effect. *Applied Soft Computing Journal*, 12(3), 1180–1186. <http://doi.org/10.1016/j.asoc.2011.09.017>
- Yokoyama, R., Bae, S. H., Morita, T., & Sasaki, H. (1987). Multiobjective Optimal Generation Dispatch Based on Probability Security Criteria. *IEEE Transactions on Power Systems*, 3(1), 317–324. <http://doi.org/10.1109/59.43217>

**APPENDIX D**  
**LIST OF PUBLICATIONS**

**Hong Mee Song**, Mohd Herwan Sulaiman, Mohd Rusllim Mohamed, *An Application of Flower Pollination Algorithm to Solve Combined Economic Emission Dispatch by Considering Valve-Point Loading Effect*, International Review on Modelling and Simulations (IREMOS), Vol 8, No. 4, pp. 427-435 (2015). Abs./Ind.: SCOPUS.

**Hong Mee Song**, Mohd Herwan Sulaiman, Mohd Rusllim Mohamed, *An Application of Grey Wolf Optimizer for Solving Combined Economic Emission Dispatch Problems*, International Review on Modelling and Simulations (IREMOS), Vol 7, No. 5, pp. 838-844 (2014). Abs./Ind.: SCOPUS.

Wong Lo Ing, **Hong Mee Song**, Mohd Herwan Sulaiman, Mohd Rusllim Mohamed, *Grey Wolf Optimizer for Economic Dispatch*, PECON 2014, Kuching, Sarawak.

**Hong Mee Song**, Mohd Herwan Sulaiman, Mohd Rusllim Mohamed, *Grey Wolf Optimizer Technique to Solve Combined Economic Emission Dispatch (CEED) Problem*, The Asian Conference on Society, Education & Technology 2014 (ACSET 2014), Osaka, Japan, 28 October - 2 November 2014.

**M. S. Hong**, M. H. Sulaiman, M. R. Mohamed, L. I. Wong, *Comparative Study of Economic Dispatch by Using Various Optimization Techniques*, 2nd Power and Energy Conversion Symposium, (PECS) 2014, Utem, Melaka, 12 May 2014.