

## References

- [1] T. E. DyLiacco, "An Adaptive Reliability Control System", *IEEE Transaction on Power Apparatus and Systems*, Vol. PAS-86, No. 5, 1967, pp. 517-531.
- [2] Z. Michalewicz, "Genetic Algorithms, Numerical Optimization and Constraints", *Proceedings of the 6<sup>th</sup> International Conference on GAs*, Morgan Kaufmann, 1995, pp. 151-158.
- [3] I. Bratko, *PROLOG Programming for Artificial Intelligence*, 2<sup>nd</sup> Edition, Addison-Wesley Publishers Ltd., 1990.
- [4] A. G. Bakirtzis and A. P. Meliopoulos, "Incorporation of Switching Operations in Power System Corrective Control Computations", *IEEE Transaction on Power Systems*, Vol. 2, No. 3, 1987, pp. 669-676.
- [5] M. S. Abdel-Salam, M. Z. El-Sadek, A. A. Ibrahim and A. Ahmed, "Voltage Profile Optimization as Influenced by Power System Configuration", *European Transaction on Electrical Power Engineering*, Vol. 8, No. 6, November / December 1998.
- [6] H. W. Dommel and W. F. Tinney, "Optimal Power Flow Solutions", *IEEE Transaction on Power Apparatus and Systems*, Vol. 87, 1968, pp. 1866-1876.
- [7] K. Y. Lee and F. F. Yang "Optimal Reactive Power Planning Using Evolutionary Algorithms: A Comparative Study for Evolutionary Programming, Evolutionary Strategy, Genetic Algorithm, and Linear Programming" *IEEE Transaction on Power Systems*, Vol. 13, No. 1, February 1998, pp. 101-108.
- [8] V. Petridis, S. Kazarlis and A. Bakirtzis "Varying Fitness Function in Genetic Algorithm Constrained Optimization: The cutting Stock and Unit Commitment Problems", *IEEE Transaction on Systems, Man, and Cybernetics-Part B*, Vol. 28, No. 5, October 1998, pp. 629-640.

- 
- [9] H. Yoshida K. Kawata Y. Fukuyama and Y. Nakanishi, "A Particle Swarm Optimization for Reactive Power and Voltage Control Considering Voltage Stability", *Proceedings of the 1999 Intelligent Systems Application to Power Systems (ISAP'99)*, Rio de Janeiro (Brazil), April 4-8, 1999, pp. 117-121.
- [10] K. Y. Lee, Y. M. Park and J. L. Ortiz, "A United Approach to Optimal Real and Reactive Power Dispatch", *IEEE Transaction on Power Apparatus and Systems*, Vol. 104, 1985, pp.1147-1153.
- [11] U. Spanel and G. Krost, "System Restoration Guidance as Intelligent Application Function in Power System Control", *Proceedings of the 1999 Intelligent Systems Application to Power Systems (ISAP'99)*, Rio de Janeiro (Brazil), April 4 - 8, 1999, pp. 51-55.
- [12] Deutsche Verbundgesellschaft e.V., *Das versorgungsgerechte Verhalten der thermischen Kraftwerke*, Heidelberg, Oktober 1991.
- [13] G. Krost and G. Bakare, "A Genetic Algorithm Based Approach for Improvement in Voltage Profile and Real Power Loss Minimization" *Proceedings (CD-ROM) of the IEEE Power Tech '99 Conference*, Budapest (Hungary), August 29 - September 2, 1999, Section 24, paper BP99-293-23.
- [14] M. Mitchell, *An Introduction to Genetic Algorithms*, Massachusetts Institute of Technology Press, 1996.
- [15] D. E. Goldberg, *Genetic Algorithms in Search, Optimization and Machine Learning*, Addison-Wesley, 1989.
- [16] D. A. Coley, *An Introduction to Genetic Algorithms for Scientists and Engineers*, World Scientific Publishing Co., 1999.
- [17] K. Iba, "Reactive Power Optimization by Genetic Algorithm", *IEEE Transactions on Power Systems*, Vol. 9, No. 2, May 1994, pp. 685-692.
- [18] B. H. Chowdhury and S. Rahman, "A Review of Recent Advances in Economic Dispatch", *IEEE Transactions on Power Systems*, Vol. 5, No. 4, November 1990, pp. 1248-1259.

- 
- [19] A. H. Mantawy, Y. L. Abdel-Magid and S. Z. Selim, “ Integrating Genetic Algorithms, Tabu Search and Simulated Annealing for the Unit Commitment Problem”, *IEEE Transactions on Power Systems*, Vol. 10, No. 4, November 1995, pp. 1919-1926.
- [20] <http://www.uni-duisburg.de/FB9/EAN>.
- [21] Z. Z. Zhang, G. S. Hope and O. P. Malik, “Expert Systems in Electric Power Systems - A Bibliographical Survey” *IEEE Transactions on Power Systems*, Vol. 4, No. 4, October 1989, pp. 1355-1361.
- [22] C. C. Liu and T. Dillon, “State-of-the-art of Expert Systems Application to Power Systems”, *International Journal of Electrical Power and Energy Systems*, Vol. 4, No. 2/3, April / June 1992, pp. 86-96.
- [23] J. Weisman and R. Eckart, *Modern Power Plant Engineering*, Prentice-Hall Inc., 1985.
- [24] G. L. Kusic, *Computer-Aided Power Systems Analysis*, PRENTICE-Englewood Cliffs, New Jersey 1986.
- [25] N. Ford, *Prolog Programming*, John Wiley & Sons Ltd., 1989.
- [26] A. S. Debs, *Modern Power Systems Control and Operation*, Kluwer Academic Publishers, 1988.
- [27] A. J. Gaul, *Wirtschaftlich optimale Laststeuerung mit evolutionären Strategien*, Dissertation Universität Dortmund, 1997.
- [28] P. Hoffmann, *Berücksichtigung schaltbarer Betriebsmittel bei der Spannungs-Blindleistungs-Optimierung*, Dissertation RWTH-Aachen, 1994.
- [29] A. Litzinger, *Systemintegration, Weiterentwicklung und Anwendung eines Trainingssimulators für die Betriebsführung elektrischer Netze*, Dissertation Gerhard-Mercator-Universität - GH Duisburg, 1997.
- [30] D. Merritt, *Building Expert Systems in Prolog*, Spring-Verlag New York Inc., 1989.

- 
- [31] J. Machowski, J. W. Bialek and J. R. Bumby, *Power System Dynamics and Stability*, John Wiley & Sons Ltd., 1997.
- [32] S. Vadera, *Expert System Applications*, Sigma Press, Wilmslow, United Kingdom 1989.
- [33] G. W. Stagg and A. H. El-Abiad, *Computer Methods in Power System Analysis*, McGraw-Hill, Inc., 1981.
- [34] Y. Wallach, *Calculations and Programs for Power System Networks*, Prentice-Hill Inc., 1986.
- [35] T. Cegrell, *Power System Control Technology*, Prentice-Hall International (UK) Ltd., 1986.
- [36] P. Kundur, *Power System Stability and Control*, McGraw-Hill, Inc., 1994.
- [37] J. A. Momoh and M. E. EL-Hawary, *Electric Systems, Dynamics and Stability with Artificial Intelligence Applications*, Marcel Dekker, Inc., 2000.
- [38] J. J. Grainger and W. D. Stevenson, Jr., *Power System Analysis*, McGraw-Hill, Inc. 1994.
- [39] A. J. Wood and B. F. Wollenberg, *Power Generation Operation and Control*, John Wiley & Sons Inc., 1984.
- [40] G. Krost, *Expertensysteme im Betrieb elektrischer Energieversorgungsnetze, realisiert mit einem Trainingssystem für den Netzwiederaufbau nach Gross-Störungen*, Habilitation Gerhard-Mercator-Universität Duisburg, 1992.
- [41] P. Beckhaus, *Implementierung der Sekundärregelung und Erweiterung des Lastmodells in einem Trainingssimulator*, Diplomarbeit Gerhard-Mercator-Universität Duisburg, 1997.
- [42] L. L. Lai, *Intelligent System Applications in Power Engineering, Evolutionary Programming and Neural Networks*, John Wiley & Sons Ltd., 1998.

- 
- [43] W. Y. Ng “ Generalized Generation Distribution Factors for Power System Security Evaluation”, *IEEE Transactions on Power Apparatus and Systems*, Vol. PAS-100, No. 3, March 1981, pp. 1001-1005.
- [44] T. Werdelmann, *Rechnergestützte Entscheidungshilfen zur Korrektur unzulässiger Betriebszustände in elektrischen Energieübertragungsnetzen*, Dissertation Paderborn Universität Paderborn GH, 1992.
- [45] J. G. Groß, *Optimierung von Blockeinsatz und Lastfluß in Zentralen Bahnstrom- versorgungssystemen*, Dissertation RWTH-Aachen, 1995.
- [46] K. Ju, *Expert System for Interlocking and Sequence-Switching*, Dissertation Gerhard- Mercator-Universität Duisburg, 1996.
- [47] P. Smith, *Expert System Development in Prolog and Turbo-prolog*, Smith, 1988.
- [48] O. I. Elgerd, *Electric Energy Systems Theory: An Introduction*, McGraw-Hill, 1971.
- [49] M. J. H. Sterling, *Power System Control*, Peter Peregrinus Ltd., 1978.
- [50] U. Spanel, *Konzeption und Komponenten für ein generisches Netzwiederaufbau- Expertensystem*, Dissertation Gerhard-Mercator-Universität - GH Duisburg, 1998.
- [51] K. Salek, *Implementation und Verifikation eines generischen wissensbasierten Netzwiederaufbau-Systems*, Dissertation Gerhard-Mercator-Universität - GH Duisburg, 2001.
- [52] H. H. Happ, “Optimal Power Dispatch - A Comprehensive Survey”, *IEEE Transactions on Power Apparatus & Systems*, Vol. PAS-96, No. 3, May / June 1977, pp. 841-849.
- [53] J. A. Momoh, M. E. El-Hawary and R. Adapa, “A Review of Selected Optimal Power Flow Literature to 1993 Part I & II”, *IEEE Transactions on Power Systems*, Vol. 14, No. 1, February 1999, pp. 96-111.
- [54] V. Miranda, D. Srinivasan and L. Proenca, “Evolutionary Computation in Power Systems”, *Electrical Power and Energy Systems*, Vol. 20, No. 2, 1998, pp. 89-98.

- [55] J. Nanda, L. Hari and M. L. Kothari, "Economic Emission Load Dispatch with Line Flow Constraints using Classical Technique", *IEE Proceedings on Transmission and Distribution*, Vol. 141, No. 1, January 1994, pp. 1-10.
- [56] S. Fustar, M. Chen and B. Brewer, "Toward an Intelligent Optimal Power Flow", *Expert System Application to Power System*, 1993, pp. 680-685.
- [57] S. J. Cheng, O. P. Malik and G. S. Hope, "An Expert Systems for Voltage and Reactive Power Control of a Power System" *IEEE Transactions on Power Systems*, Vol. 3, No. 4, November 1988, pp. 1449-1455.
- [58] B. Stott and O. Alsac, "Fast Decoupled Load Flow" *IEEE Transactions on Power Apparatus and Systems*, Vol. PAS-93, No. 3, May/June 1974, pp. 859-869.
- [59] D. C. Walters and G. B. Sheble, "Genetic Algorithm Solution of Economic Dispatch with Valves Point Loading", *IEEE Transactions on Power Systems*, Vol. 8, No. 3, August 1993, pp. 1325-1332.
- [60] J. J. Grefenstette, "Optimization of Control Parameters for Genetic Algorithms", *IEEE Transaction on Systems, Man, and Cybernetics*, Vol. 16, No. 1, 1986 pp. 122-128.
- [61] K. Krishnakumar, "Micro Genetic Algorithms for Stationary and Non-stationary Function Optimization", *SPIE Intelligent Control and Adaptive System*, Vol. 1196, 1989, pp. 289-296.
- [62] D. Carroll, "Genetic Algorithms and Optimizing Chemical Oxygen-iodine Lasers", *Developments in Theoretical and Applied Mechanics.*, Vol. 18, 1996, pp. 411-424.
- [63] U. Spanel and G. Krost "Operator Training System - A flexible Approach" *12<sup>th</sup> CEPSI*, Pattaya (Thailand), 1998.
- [64] D. Rumpel, N. M. Nagdy and T. Ader, "Database/Power-Flow Interlinkage of a Stand –Alone Power System Training Simulator", *European Transactions on Electrical Power Engineering*, Vol. 1, No. 6, November/December 1991, pp. 311-316.

- 
- [65] D. Rumpel and T. Ader, "Parametrizing the Power Plant and Loads of a Stand-Alone Training Simulator", *European Transactions on Electrical Power Engineering*, Vol. 2, No. 1, January/February 1992, pp.33-38.
- [66] D. Rumpel, G. Krost and N. M. Nagdy, "Intelligent Data Applications to Power Systems", *Engineering Intelligent Systems*, Vol. 3, No. 2, June 1995, pp. 121-128.
- [67] D. Rumpel and G. Krost, "Principles of a Language Oriented Data System and its ES Application" *Expert System Application to Power System*, 1993, pp. 624-629.
- [68] S. S. Rao, *Optimization: Theory and Applications*, Wiley Eastern, New-Delhi, 1987.
- [69] D. Powell and M. M. Skolnick, "Using Genetic Algorithms in Engineering Design Optimization with Non-linear Constraints", *Proceedings of the 5<sup>th</sup> International Conference on Genetic Algorithms*, Morgan Kaufmann, 1991, pp. 424-430.
- [70] J. G. Rolim, L. J. B. Machado and M. R. Irving, "Switching to Control Voltage Problems - A Hybrid Approach" *Electrical Power and Energy Systems*, Vol. 19, No. 1, 1997, pp. 69-74.
- [71] MPROLOG Release 2.1 Apollo Domain, September 1985.
- [72] U. Mayr, "Gegenwart und Entwicklungstendenzen der Netzleittechnik", *Elektrizitätswirtschaft*, Jahrg. 87, Heft 3, 1988, S. 172-175.
- [73] A. D. Papalexopoulos, C. F. Imparato and F. F. Wu, "Large Scale Optimal Power Flow: Effects of Initialization, Decoupling and Discretization" *IEEE Transaction on Power Systems*, Vol. 4, No. 2, May 1989, pp. 748-759.
- [74] W. M. Spears and K. A. De Jong, "On the Virtues of Parameterized Uniform Crossover", *Proceedings of the 4<sup>th</sup> International Conference on Genetic Algorithms*, Morgan Kaufmann, 1991.
- [75] K. A. De Jong, *An Analysis of the Behavior of a Class of Genetic Adaptive Systems*, Ph.D. thesis, University of Michigan, Ann Arbor, 1975.

- [76] T. Bäck, “Self Adaptation In Genetic Algorithm” in *Towards a Practice on Autonomous Systems*, MIT Press, 1991, pp. 263-271.