

TUGAS MAKALAH “REKAYASA DAN PENGKONDISIAN ENERGI TERBARUKAN”

1. KELOMPOK A

PEMBANGKIT LISTRIK MIKRO HIDRO

2. KELOMPOK B

PEMBANGKIT LISTRIK TENAGA AIR SKALA BESAR

3. KELOMPOK C

PEMBANGKIT LISTRIK TENAGA SURYA

4. KELOMPOK D

PEMBANGKIT LISTRIK TENAGA ANGIN

5. KELOMPOK E

PEMBANGKIT LISTRIK BIOMASSA

6. KELOMPOK F

PEMBANGKIT LISTRIK FUEL CELL

7. KELOMPOK G

PEMBANGKIT LISTRIK TENAGA OMBAK LAUT

8. KELOMPOK H

PEMBANGKIT LISTRIK OTEC

9. KELOMPOK I

SISTEM PENGENDALI PADA PEMBANGKIT LISTRIK TENAGA ANGIN

10. KELOMPOK J

SISTEM PENGENDALI PADA PEMBANGKIT LISTRIK TENAGA SURYA

11. KELOMPOK K

ENERGI TERMAL SURYA

12. KELOMPOK L

PEMBANGKIT LISTRIK GEOTERMAL

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 - Tujuan
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- LAMPIRAN (JIKA ADA)

DAFTAR PUSTAKA

- [1] Ali Keyhani, Mohammad N. Marwali, dan Min Dai, 2010, "Integration of Green and Renewable Energy on Electric Power Systems", John Wiley & Sons, New Jersey.
- [2] Aldo Vieira da Rosa, 2005, "Fundamentals of Renewable Energy Processes", Elsevier Academic Press, London.
- [3] A. Tapia, G. Tapia, J. X. Ostolaza, and J. R. Saenz, "Modeling and control of a wind turbine driven doubly fed induction generator," IEEE Transactions on Energy Conversion, Vol.18, pp. 194-204, 2003. Bent Sørensen, 2007, "Renewable Energy Conversion, Transmission, and Storage", AP Press, New York.
- [4] B.C. Babu and K.B. Mohanty, "Doubly-Fed Induction Generator for Variable Speed Wind Energy Conversion Systems - Modeling & Simulation", International Journal of Computer and Electrical Engineering, Vol. 2, No. 1, pp. 1793-8163, February, 2010.
- [5] David Pimentel, 2008, "Biofuels, Solar and Wind as Renewable Energy Systems: Benefits and Risks", Springer, New York.
- [6] H.Li and Z. Chen, "Overview of generator topologies for wind turbines," IET Proc. Renewable Power Generation, vol. 2, no. 2, pp. 123–138, Jun.2008.
- [7] J.G. Sloopweg, S. W. H. Haan, H. Polinder, and W.L. Kling. "General Model for Representing Variable Speed Wind Turbines in Power System Dynamics Simulations". IEEE Trans. on Power Systems, Vol. 18, No. 1, February, 2003

- [8] J.J. Grainger dan W.D. Stevenson, 1994, "Power System Analysis", McGraw-Hill, Singapore.
- [9] John Twidell and Tony Weir, 2006, "Renewable Energy Resources, Second Edition", Taylor & Francis, New York.
- [10] L. Mihet-Popa and F. Blaabrierg, "Wind Turbine Generator Modeling and Simulation Where Rotational Speed is the Controlled Variable", IEEE Transactions on Industry Applications, Vol. 40, No.1, Jan./Feb. 2004.
- [11] Syahputra, R., Soesanti, I. (2016). DFIG Control Scheme of Wind Power Using ANFIS Method in Electrical Power Grid System. International Journal of Applied Engineering Research (IJAER), 11(7), pp. 5256-5262.
- [12] Soesanti, I., Syahputra, R. (2016). Batik Production Process Optimization Using Particle Swarm Optimization Method. Journal of Theoretical and Applied Information Technology (JATIT), 86(2), pp. 272-278.
- [13] Syahputra, R., Soesanti, I. (2016). Design of Automatic Electric Batik Stove for Batik Industry. Journal of Theoretical and Applied Information Technology (JATIT), 87(1), pp. 167-175.
- [14] Syahputra, R. (2016). Application of Neuro-Fuzzy Method for Prediction of Vehicle Fuel Consumption. Journal of Theoretical and Applied Information Technology (JATIT), 86(1), pp. 138-149.
- [15] Jamal, A., Suropto, S., Syahputra, R. (2016). Performance Evaluation of Wind Turbine with Doubly-Fed Induction Generator. International Journal of Applied Engineering Research (IJAER), 11(7), pp. 4999-5004.
- [16] Syahputra, R., (2016), "Transmisi dan Distribusi Tenaga Listrik", LP3M UMY, Yogyakarta, 2016.
- [17] Syahputra, R., (2015), "Teknologi dan Aplikasi Elektromagnetik", LP3M UMY, Yogyakarta, 2016.
- [18] Syahputra, R., Robandi, I., Ashari, M. (2015). Performance Improvement of Radial Distribution Network with Distributed Generation Integration Using Extended Particle Swarm Optimization Algorithm. International Review of Electrical Engineering (IREE), 10(2). pp. 293-304.
- [19] Syahputra, R., Robandi, I., Ashari, M. (2015). Reconfiguration of Distribution Network with DER Integration Using PSO Algorithm. TELKOMNIKA, 13(3). pp. 759-766.
- [20] Syahputra, R., Robandi, I., Ashari, M. (2015). PSO Based Multi-objective Optimization for Reconfiguration of Radial Distribution Network. International Journal of Applied Engineering Research (IJAER), 10(6), pp. 14573-14586.
- [21] Syahputra, R. (2015). Simulasi Pengendalian Temperatur Pada Heat Exchanger Menggunakan Teknik Neuro-Fuzzy Adaptif. Jurnal Teknologi, 8(2), pp. 161-168.
- [22] Syahputra, R. (2015). Characteristic Test of Current Transformer Based EMTP Software. Jurnal Teknik Elektro, 1(1), pp. 11-15.
- [23] Syahputra, R., (2012), "Distributed Generation: State of the Arts dalam Penyediaan Energi Listrik", LP3M UMY, Yogyakarta, 2012.
- [24] Jamal, A., Suropto, S., Syahputra, R. (2015). Multi-Band Power System Stabilizer Model for Power Flow Optimization in Order to Improve Power System Stability. Journal of Theoretical and Applied Information Technology, 80(1), pp. 116-123.
- [25] Syahputra, R., Robandi, I., Ashari, M. (2014). Optimization of Distribution Network Configuration with Integration of Distributed Energy Resources Using Extended Fuzzy Multi-objective Method. International Review of Electrical Engineering (IREE), 9(3), pp. 629-639.

- [26] Syahputra, R., Robandi, I., Ashari, M. (2014). Performance Analysis of Wind Turbine as a Distributed Generation Unit in Distribution System. *International Journal of Computer Science & Information Technology (IJCSIT)*, Vol. 6, No. 3, pp. 39-56.
- [27] Syahputra, R., Robandi, I., Ashari, M., (2014), "Distribution Network Efficiency Improvement Based on Fuzzy Multi-objective Method". *IPTEK Journal of Proceedings Series*. 2014; 1(1): pp. 224-229.
- [28] Jamal, A., Syahputra, R. (2014). Power Flow Control of Power Systems Using UPFC Based on Adaptive Neuro Fuzzy. *IPTEK Journal of Proceedings Series*. 2014; 1(1): pp. 218-223.
- [29] Syahputra, R., (2013), "A Neuro-Fuzzy Approach For the Fault Location Estimation of Unsynchronized Two-Terminal Transmission Lines", *International Journal of Computer Science & Information Technology (IJCSIT)*, Vol. 5, No. 1, pp. 23-37.
- [30] Jamal, A., Syahputra, R. (2013). UPFC Based on Adaptive Neuro-Fuzzy for Power Flow Control of Multimachine Power Systems. *International Journal of Engineering Science Invention (IJESI)*, 2(10), pp. 05-14.
- [31] Syahputra, R., (2012), "Fuzzy Multi-Objective Approach for the Improvement of Distribution Network Efficiency by Considering DG", *International Journal of Computer Science & Information Technology (IJCSIT)*, Vol. 4, No. 2, pp. 57-68.
- [32] Jamal, A., Syahputra, R. (2012), "Adaptive Neuro-Fuzzy Approach for the Power System Stabilizer Model in Multi-machine Power System", *International Journal of Electrical & Computer Sciences (IJECS)*, Vol. 12, No. 2, 2012.
- [33] Jamal, A., Syahputra, R. (2011), "Model Power System Stabilizer Berbasis Neuro-Fuzzy Adaptif", *Semesta Teknika*, Vol. 14, No. 2, 2011, pp. 139-149.
- [34] Utomo, A.T., Syahputra, R., Iswanto, (2011), "Implementasi Mikrokontroler Sebagai Pengukur Suhu Delapan Ruangan", *Jurnal Teknologi*, 4(2).
- [35] Syahputra, R., (2010), "Aplikasi Deteksi Tepi Citra Termografi untuk Pendeteksian Keretakan Permukaan Material", *Forum Teknik*, Vol. 33, 2010.
- [36] Syahputra, R., Soesanti, I. (2015). "Control of Synchronous Generator in Wind Power Systems Using Neuro-Fuzzy Approach", *Proceeding of International Conference on Vocational Education and Electrical Engineering (ICVEE) 2015*, UNESA Surabaya, pp. 187-193.
- [37] Syahputra, R., Robandi, I., Ashari, M. (2014). "Optimal Distribution Network Reconfiguration with Penetration of Distributed Energy Resources", *Proceeding of 2014 1st International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE) 2014*, UNDIP Semarang, pp. 388 - 393.
- [38] Soedibyo, Ashari, M., Syahputra, R. (2014), Power loss reduction strategy of distribution network with distributed generator integration. *1st International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE) 2014*, UNDIP Semarang, pp. 404 – 408.
- [39] Syahputra, R., Robandi, I., Ashari, M., (2013), "Distribution Network Efficiency Improvement Based on Fuzzy Multi-objective Method". *International Seminar on Applied Technology, Science and Arts (APTECS)*. 2013; pp. 224-229.
- [40] Syahputra, R., Robandi, I., Ashari, M., (2012), "Reconfiguration of Distribution Network with DG Using Fuzzy Multi-objective Method", *International Conference on Innovation, Management and Technology Research (ICIMTR)*, May 21-22, 2012, Melacca, Malaysia.
- [41] Jamal, A., Syahputra, R., (2011), "Design of Power System Stabilizer Based on Adaptive Neuro-Fuzzy Method". *International Seminar on Applied Technology, Science and Arts (APTECS)*. 2011; pp. 14-21.

- [42] Syahputra, R. (2010). Fault Distance Estimation of Two-Terminal Transmission Lines. Proceedings of International Seminar on Applied Technology, Science, and Arts (2nd APTECS), Surabaya, 21-22 Dec. 2010, pp. 419-423.
- [43] Syahputra, R., (2015), "Teknologi dan Aplikasi Elektromagnetik", LP3M UMY, Yogyakarta, 2016.
- [44] Syahputra, R., (2014), "Estimasi Lokasi Gangguan Hubung Singkat pada Saluran Transmisi Tenaga Listrik", Jurnal Ilmiah Semesta Teknik Vol. 17, No. 2, pp. 106-115, Nov 2014.
- [45] Syahputra, R., Robandi, I., Ashari, M., (2011), "Modeling and Simulation of Wind Energy Conversion System in Distributed Generation Units". International Seminar on Applied Technology, Science and Arts (APTECS). 2011; pp. 290-296.
- [46] Syahputra, R., Robandi, I., Ashari, M., (2011), "Control of Doubly-Fed Induction Generator in Distributed Generation Units Using Adaptive Neuro-Fuzzy Approach". International Seminar on Applied Technology, Science and Arts (APTECS). 2011; pp. 493-501.
- [47] Jamal, A., Syahputra, R. (2016). Heat Exchanger Control Based on Artificial Intelligence Approach. International Journal of Applied Engineering Research (IJAER), 11(16), pp. 9063-9069.
- [48] Syahputra, R., Soesanti, I. (2015). Power System Stabilizer model based on Fuzzy-PSO for improving power system stability. 2015 International Conference on Advanced Mechatronics, Intelligent Manufacture, and Industrial Automation (ICAMIMIA), Surabaya, 15-17 Oct. 2015 pp. 121 - 126.