DAFTAR PUSTAKA

[1] R. Syahputra, A. W. Nugroho, A. N. N. Chamim, Widyasmoro, dan T. I. Prasetyo, "Performance Analysis of Synchronous Generator: A Case Study in Steam Power Plant at PT POMI Paiton Unit 7 Probolinggo, East Java, Indonesia," *Journal of Electrical Technology UMY (JET-UMY)*, vol. 2, no. 4, pp. 144–152, Dec. 2018, doi: 10.18196/jet.2445.

[2] R. C. Pamungkas, M. Y. Mustar, R. Syahputra, J. Lingkar, S. Tamantirto, and K. Bantul, "Analytical Studies of the Excitation System of Synchronous Generator in Steam Power Plant Unit 3 and 4 at PJB UP Gresik," *Journal of Electrical Technology UMY (JET-UMY)*, vol. 1, no. 3, pp. 148–156, Oct. 2017, doi: 10.18196/jet.1320.

[3] M. M. Ibrahim, J. D. Jiya, and I. O. Harrison, "Modelling and simulation of automatic voltage regulator system," *International Journal of Computer Applications (IJCA)*, vol. 178, no. 1, pp. 24–28, Nov. 2017, doi: 10.5120/ijca2017915715.

[4] I. A. Ezenugu and C. S. Nwokonko, "Automatic Voltage Regulator Control System for Synchronous Generator," *Saudi Journal of Engineering and Technology*, vol. 9, no. 6, pp. 265–273, Jun. 2024, doi: 10.36348/sjet.2024.v09i06.004.

[5] M. S. Alamgir and S. Dev, "Design and Implementation of an Automatic Voltage Regulator with a Great Precision and Proper Hysteresis," *International Journal of Advanced Science and Technology*, vol. 75, pp. 21–32, Feb. 2015, doi: 10.14257/ijast.2015.75.03.

[6] P. Sankhwar, "Excitation system, proportional and integral controls of a synchronous generator for reducing adverse impacts to power system from voltage fluctuations," *International Journal of Electrical Power System & Technology*, vol. 11, no. 1, pp. 11–27, Feb. 2025. Available: https://doi.org/10.2139/ssrn.5168281.

[7] J. O. Aibangbee, "Voltages and Reactive Power Controls in Power System Network Using Automatic Voltage Regulator (Avr) and Static Var Compensator Methods," vol. 11, no. 1, pp. 29–34, doi: 10.9790/1676-11122934.

[8] M. M. Orosun, R. O. Orosun, and S. S. Adamu, "Modeling and Simulation of Automatic Generation Control System for Synchronous Generator with Model Predictive Controller," *Zimbabwe Journal of Science & Technology*, vol. 11, pp. 142–157, Jan. 2016. [Online]. Available: https://www.researchgate.net/publication/316991276

[9] O. A. M. Omar, M. I. Marei, dan M. A. Attia, "Comparative Study of AVR Control Systems Considering a Novel Optimized PID-Based Model Reference Fractional Adaptive Controller," *Energies*, vol. 16, no. 2, art. 830, 11 Jan. 2023, doi: 10.3390/en16020830.

[10] I. A. Halepoto, I. Hussain, W. Kumar, and B. S. Chowdhry, "Performance analysis of conventional and fuzzy logic controlled automatic voltage regulator systems in a noisy environment," in *Proc. 2014 International Conference on Intelligent Systems Engineering (ICISE)*, Islamabad, Pakistan, Jan. 2014. [Online]. Available: https://www.researchgate.net/publication/272474478

[11] *N. K. Yegireddy, S. Panda, and P. Tentu, "Comparative analysis of PID controller for an Automatic Voltage Regulator system," in Proc. 2015 Int. Conf. Electrical, Electronics, Signals, Communication and Optimization (EESCO), Hyderabad, India, Jan. 2015, pp. 1–6, doi: 10.1109/EESCO.2015.7253619*.

[12] R. Ramya and K. Selvi, "A simple fuzzy excitation control system for synchronous generator," in *Proc. 2011 IEEE Int. Conf. Emerging Trends in Electrical and Computer Technology (ICETECT)*, Nagercoil, India, 23–24 Mar. 2011, pp. 35–39, doi: 10.1109/ICETECT.2011.5947321

[13] A. Zulhakim, Y. Suzantry Handayani, dan I. Priyadi, "Pengaruh sistem eksitasi terhadap generator sinkron tiga fasa di Unit 1 PT. PLN Indonesia Power ULPL TA Musi," *Teknosia*, vol. 17, no. 1, pp. 1–12, Jul. 2023. [Online]. Available: https://ejournal.unib.ac.id/index.php/teknosia

[14] H. Prasetijo, Ropiudin, dan B. Dharmawan, "Generator magnet permanen sebagai pembangkit listrik putaran rendah," Dinamika Rekayasa, vol. 8, no. 2, pp. 70–77, Aug. 2012. DOI: 10.20884/1.dr.2012.8.2.106..

[15] H. Azis, P. Pawenary, dan M. T. B. Sitorus, "Simulasi pemodelan sistem eksitasi statis pada generator sinkron terhadap perubahan

beban," *Energi dan Kelistrikan: Jurnal Ilmiah*, vol. 11, no. 2, pp. 46–54, Jul.–Dec. 2019. DOI: 10.33322/energi.v11i2.483.

[16] G. Y. Puspitaputri, "Perancangan dan pembuatan Automatic Voltage Regulator (AVR) untuk generator sinkron di Pembangkit Listrik Tenaga Biomassa (PLTBm) menggunakan metode Hill Climbing," Skripsi Sarjana, Prodi Teknik Elektronika Otomasi, Fakultas Vokasi, Institut Teknologi Sepuluh Nopember, Surabaya, 2021. [Online]. Available: http://repository.its.ac.id/id/eprint/90321.

[17] N. Bijang, Y. Rompon, dan T. Pairunan, "Analisa sistem Automatic Voltage Regulator (AVR) dengan stabilizer pada suatu mesin pembangkit tenaga listrik," in *Prosiding Seminar Nasional Sains dan Terapan 2019*, Fakultas MIPA, Universitas Sam Ratulangi, Manado, 19–20 Sept. 2019, pp. 13–24. [Online]. Available: http://repo.unsrat.ac.id/id/eprint/2700.

[18] S. Prihutomo, "Sistem eksitasi AVR (Automatic Voltage Regulator) generator 3-phase pada pembangkit listrik tenaga mikrohidro berbasis PID," Tugas Akhir, Program Studi Teknik Elektro, Sekolah Vokasi, Universitas Diponegoro, Semarang, Indonesia, 2021. [Online]. Available: https://eprints2.undip.ac.id/id/eprint/13043.

[19] I. A. Halepoto, I. Hussain, W. Kumar, and B. S. Chowdhry, "Performance analysis of conventional and fuzzy logic controlled automatic voltage regulator systems in a noisy environment," in *Proc. 2014 International Conference on Intelligent Systems Engineering (ICISE)*, Islamabad, Pakistan, Jan. 2014. [Online]. Available: https://www.researchgate.net/publication/272474478.

[20] A. Setiawan, "Optimisasi Automatic Voltage Regulator (AVR) berbasis PID menggunakan metode hybrid Grey Wolf Optimization - Genetic Algorithm (HGWGA)," Tesis Magister, Program Magister Teknik Elektro, Fakultas Teknik, Universitas Brawijaya, Malang, 2021. [Online]. Available: http://repository.ub.ac.id/id/eprint/185850.

[21] "Power-System-Analysis-by-Hadi-Saadat-Electrical-Engineering-libre".

[22] H. Supriyanto, F. Suryatini, A. R. H. Martawireja, dan H. Rudiansyah, "Implementasi kontroler PID dengan metode tuning Ziegler-Nichols dan Cohen-Coon pada sistem SCADA kendali

level air," *Jurnal Teknologi Terapan*, vol. 8, no. 2, hal. 149–156, Sep. 2022. DOI: 10.31884/jtt.v8i2.410.

[23] A. M. Prasetia, L. Sartika, dan A. Ma'ruf, "Penggunaan PID pada Automatic Voltage Regulator (AVR) untuk kestabilan tegangan terminal generator sinkron 3 fasa," *Elektrika Borneo*, vol. 9, no. 2, pp. 55–59, Okt. 2023. DOI: 10.35334/eb.v9i2.4372.

[24] P. Mangera, F. H. Sumbung, dan D. Parenden, "Automatic Voltage Regulator (AVR) Controller Design based on Routh's criterion stability analysis in diesel-based power plants," in *Proc. Int. Conf. on Science and Technology (ICST 2018)*, Atlantis Highlights in Engineering, Des. 2018, pp. 545–553. DOI: 10.2991/icst-18.2018.113.

[25] L. Ljung, "System Identification and Simple Process Models," *LiTH-ISY-R Report*, Division of Automatic Control, Linköping University, Linköping, Sweden, Rep. no. 2464, ISSN 1400-3902, p. 15, 2003; juga tersedia sebagai presentasi dalam IEEE Conf. Decision & Control 2002, Las Vegas.

[26] K. F. Aljanaideh and D. S. Bernstein, "Initial conditions in time- and frequency-domain system identification," IEEE Control Systems Magazine, vol. 38, no. 2, pp. 80–93, Apr. 2018, doi:10.1109/MCS.2017.2786419..