

## DAFTAR PUSTAKA

- [1] D. Marsudi, "Operasi Sistem Tenaga Listrik (Edisi 3)," *Graha Ilmu*, pp. 2–5, 2016.
- [2] PT PLN (Persero) UIP2B Jamali, "Evaluasi Operasi Sistem Jawa, Madura, dan Bali Tahun 2024," p. viii, 2025.
- [3] R. I. Ombusman, "Ungkap Hasil Investigasi Pemadaman Listrik, Ombudsman: PLN Lalai," *Kliping Berita*. Accessed: Nov. 14, 2019. [Online]. Available: [https://ombudsman.go.id/news/r/ungkap-hasil-investigasi-pemadaman-listrik-ombudsman-pln-lalai?utm\\_source=chatgpt.com](https://ombudsman.go.id/news/r/ungkap-hasil-investigasi-pemadaman-listrik-ombudsman-pln-lalai?utm_source=chatgpt.com)
- [4] A. S. Putra, I. Garniwa, E. S. Arilanggaaji, and S. S. Pradana, "A study on carbon cap and trade effect to cost of electricity in accordance with the Merit Order of 300-400 MW coal power plants," in *IOP Conference Series: Earth and Environmental Science*, 2021. doi: 10.1088/1755-1315/880/1/012049.
- [5] Kementrian ESDM RI, "Peraturan Menteri Energi Dan Sumber Daya Mineral Nomor 20 Tahun 2020 Tentang Aturan Jaringan Sistem Tenaga Listrik Jawa, Madura, dan Bali", 2020
- [6] D. H. Barus and E. Y. Pramono, "No load shedding defence scheme as reinforcement in Aceh province network," in *Proceedings of the Universities Power Engineering Conference*, 2014. doi: 10.1109/UPEC.2014.6934598.
- [7] Y. Tarid, A. Purwanto, and I. Kusmarini, "Generator shedding for maintaining power system stability in Cibatu34-Mandirancan subsystem," in *International Conference on High Voltage Engineering and Power Systems, ICHVEPS 2017 - Proceeding*, 2017. doi: 10.1109/ICHVEPS.2017.8225914.
- [8] H. Aji, A. Purwanto, E. Y. Pramono, M. Angga, and Taslim, "Island operation design in bali grid with RoCoF relay," in *4th IEEE Conference on Power Engineering and Renewable Energy, ICPERE 2018 - Proceedings*, 2018. doi: 10.1109/ICPERE.2018.8739501.

- [9] A. H. Maulana, "Mengintegrasikan Adaptive Defense Scheme Ke Master Station Scada Pada Sistem Tenaga Listrik Jawa-Bali," *PETIR*, vol. 14, no. 1, 2020, doi: 10.33322/petir.v14i1.935.
- [10] M. R. Fadli, K. M. B. Nahor, N. Hariyanto, R. Rahmani, and F. S. Rahman, "Special Protection System (SPS) Designing and Testing Based on Vulnerability and Frequency Security Index: Case Study of Batam-Bintan System, Indonesia," in *2021 3rd International Conference on High Voltage Engineering and Power Systems, ICHVEPS 2021*, 2021. doi: 10.1109/ICHVEPS53178.2021.9601081.
- [11] H. Aji, Y. Wicaksono, and Y. Tarid, "Remedial Action Scheme Strategy to Mitigate N-2 Contingency on Java-Bali 500 kV Transmission System," in *ICT-PEP 2021 - International Conference on Technology and Policy in Energy and Electric Power: Emerging Energy Sustainability, Smart Grid, and Microgrid Technologies for Future Power System, Proceedings*, 2021. doi: 10.1109/ICT-PEP53949.2021.9601122.
- [12] A. Sofwan and I. Aditya, "Analisa Pelepasan Beban Oleh Under Frequency Relay Berbasis Simulasi Pada Sistem Tenaga Listrik Jawa Bali," *Sinusoida*, vol. 24, no. 2, pp. 38–46, 2022, doi: 10.37277/s.v24i2.1466.
- [13] P. D. Putra and M. P. Marbun, "Adaptive Defense Scheme Implementation in Muarakarang Subsystem to Prevent Island Operation Failure," in *Proceedings - 11th Electrical Power, Electronics, Communications, Control, and Informatics Seminar, EECCIS 2022*, 2022. doi: 10.1109/EECCIS54468.2022.9902921.
- [14] S. Thaha, A. Adiyanti, U. Usman, and A. R. Sultan, "Implementasi Over Load Shedding (OLS) Pada Interbus Transformator (IBT) #3 31.5 Mva Dan IBT #5 31.5 MVA Di GI Tello 150/66 kV Untuk Menjaga Keandalan Suplai Ke GI Borongloe, GI Daya Dan GI Mandai," *J. Teknol. Elekterika*, vol. 19, no. 1, 2022, doi: 10.31963/elekterika.v6i1.3660

- [15] A. W. Ahmad Brian Ikhsana Putra, K. M. Banjarnahor, and N. Hariyanto, "Advanced Technology Implementation of Adaptive Defense Scheme in South and Central Kalimantan System," in *6th International Conference on Power Engineering and Renewable Energy, ICPERE 2024 - Proceedings*, 2024. doi: 10.1109/ICPERE63447.2024.10845441.
- [16] D. Nurzikry, F. S. Rahman, N. Hariyanto, and A. Murdani, "Analysis of Adaptive Islanding Operation in Ungaran Subsystem, Central Java," in *6th International Conference on Power Engineering and Renewable Energy, ICPERE 2024 - Proceedings*, 2024. doi: 10.1109/ICPERE63447.2024.10845344.
- [17] M. A. Randy and R. Dalimi, "Analysis of Overload Shedding (OLS) - Adaptive Defense Scheme (ADS) on The 150 KV Priok Subsystem to Enhance The Reliability of Jakarta's Electricity Supply In N-1 N-2 Contingency Scenarios," *Int. J. Comput. Inf. Syst.*, vol. 6, no. 1, 2025, doi: 10.29040/ijcis.v6i1.223.
- [18] S. Isnandar, Marwah, K. Fajar Ari, and Prastio, "The Implementation of Probabilistic Reliability Assessment in Order to Get Mapping of Load Point Index in Java Bali 500 kV substation," in *International Conference on High Voltage Engineering and Power Systems, ICHVEPS 2017 - Proceeding*, 2017. doi: 10.1109/ICHVEPS.2017.8225910.
- [19] PT PLN (Persero) UIP2B Jamali, "Rencana Operasi Sistem Tenaga Listrik Jawa, Madura & Bali Tahun 2025-2026," 2025.
- [20] PT PLN (Persero), "Pedoman Umum Peralatan Sistem Defense Scheme," *SPLN S5.0062023*, KepDir PLN No. 0167.K/DIR/2023, 2023.
- [21] P. Kundur *et al.*, "Definition and classification of power system stability," *IEEE Trans. Power Syst.*, vol. 19, no. 3, 2004, doi: 10.1109/TPWRS.2004.825981.
- [22] S. Ntomalis, P. Iliadis, K. Atsonios, A. Nesiadis, N. Nikolopoulos, and P. Grammelis, "Dynamic modeling and simulation of non-interconnected systems under high-res penetration: The madeira Island case," *Energies*, vol. 13, no. 21, 2020, doi: 10.3390/en13215786.

- [23] B. Mukhlisoti and I. Garniwa, "Analysis Of Improvements To The Automatic Generation Control (AGC) Frequency Regulation System In The Java Madura Bali System For Intermittent New And Renewable Energy (EBT) Interconnection," *J. Ekon. Teknol. dan Bisnis*, vol. 2, no. 7, 2023, doi: 10.57185/jetbis.v2i7.49.
- [24] Pusat Kajian LKFT UGM, "Laporan Akhir Studi Kebutuhan Cadangan Fast Response Untuk Meningkatkan Keandalan, Kualitas dan Keekonomian Listrik di Sistem Jawa, Madura dan Bali 2024-2026," 2025.
- [25] F. Teng, M. Aunedi, D. Pudjianto, and G. Strbac, "Benefits of demand-side response in providing frequency response service in the future GB power system," *Front. Energy Res.*, vol. 3, no. AUG, 2015, doi: 10.3389/fenrg.2015.00036.
- [26] L. Shintawaty, "Perbandingan Biaya Penggunaan Energi Bahan Bakar Batu Bara dan Gas Pada Pembangkit Listrik," *J. Desimenasi Technol.*, vol. 7 No.2, 2019.
- [27] Dewan Energi Nasional, "Outlook Energy Indonesia 2023." 2023.
- [28] Center for Data and Information on Energy and Mineral Resources, "Handbook of Energy & Economic of Indonesia. 2012" [Online]. Available: [www.esdm.go.id](http://www.esdm.go.id)
- [29] S. P. Kanugrahan, D. F. Hakam, and H. Nugraha, "Techno-Economic Analysis of Indonesia Power Generation Expansion to Achieve Economic Sustainability and Net Zero Carbon 2050," *Sustainability*, vol. 14, no. 15, p. 9038, Jul. 2022, doi: 10.3390/su14159038.
- [30] Kementerian Keuangan, "Tata Cara Penyediaan, Penghitungan, Pembayaran, Dan Pertanggungjawaban Subsidi Listrik." 2019. [Online]. Available: <https://perpajakan.ddtc.co.id/sumber-hukum/peraturan-pusat/peraturan-menteri-keuangan-174pmk-022019>
- [31] S. H. Situmorang, "Studi Kelayakan Bisnis," in *USU Press*, 2007.
- [32] DIgSILENT GmbH, "DIgSILENT PowerFactory 2021 User Manual", 2021.
- [33] M. M. Nolis Nani, "Analisis Sistem Aliran Daya Dengan Menggunakan Aplikasi Digsilent Powerfactory," *J. Sain, Energi, Teknol. Ind.*, vol. 9, no. 1, 2024.