

REFERENSI

- [1] Menteri Energi dan Sumber Daya Mineral Republik Indonesia, *Peraturan Menteri ESDM No. 3 Tahun 2007 tentang Aturan Jaringan Sistem Tenaga Listrik Jawa-Madura-Bali*. 2007.
- [2] OCCTO, "The Investigation Committee on the Major Blackout by the 2018 Hokkaido Eastern Iburi Earthquake Final Report," *Organ. Cross-regional Coord. Transm. Oper. JAPAN*, 2018.
- [3] E. Hillberg *et al.*, "Flexibility needs in the future power system," no. March, 2019.
- [4] PT. PLN (Persero) Pusat Pengatur Beban (Load Dispatching Center), "Evaluasi Operasi Sistem Jawa Bali 2017," 2018.
- [5] PT PLN (Persero) UP2B Jawa Tengah & DIY, "Lampiran 9 Konfigurasi UP2B Jawa Tengah & DIY." .
- [6] US Forest Service, "NEC CODE Rules and Design Practice," pp. 1–13, 2002.
- [7] Central Electricity Authority New Delhi, "Manual on Transmission Planning Criteria," p.], 2013.
- [8] PT Indonesia Power UP Semarang, "Data Generator PLTGU Tambak Lorok." .
- [9] Reliability Panel AEMC, *The Frequency operating standard*, vol. 3, no. November. 2017.
- [10] Y. Rebours and D. S. Kirschen, "A Survey of Definitions and Specifications of Reserve Services," *Report, Univ. Manchester*, pp. 1–38, 2005.
- [11] H. P. Noviyani Erni, Junaidi, "Studi Pelepasan Beban Pada Skema Pertahanan (Defence Scheme) Jaringan Sistem Khatulistiwa I-1 I-2," *Jur. Tek. Elektro Fak. Tek. Univ. Tanjungpura*, vol. 2, pp. 1–7.
- [12] PT. Perusahaan Listrik Negara (Persero) P2B Bidang Perencanaan, *Single Line Diagram Jawa Bali Kompilasi 2018*. Jakarta: PT. Perusahaan Listrik Negara (Persero), 2018.
- [13] Pusat Pendidikan dan Pelatihan PT PLN (Persero), *Prinsip Kerja PLTGU*. .
- [14] PT. Perusahaan Listrik Negara (Persero), *Rencana Usaha Penyediaan Tenaga Listrik PT. PLN (Persero) 2019-2028*. Jakarta: Kementerian Energi dan Sumber Daya Mineral Republik Indonesia, 2019.
- [15] "Load flow (power flow) - step-by-step, theory and calculation." [Online]. Available: <https://electrism.com/load-flow-power-flow.html>. [Accessed: 17-Nov-2019].
- [16] P. Kundur, *Power System Stability And Control*. New York: McGraw-Hill Professional, 1994.

- [17] D. Barus, "Implementation of Free Governor Action in Power Plant to Increase System Resilience of Jawa Bali Power System Network," *Chart*, no. September, pp. 1–5, 2010.
- [18] H. Seifi and H. Delkhosh, *Model Validation for Power System Frequency Analysis*. 2019.
- [19] Asian Development association, *Handbook on Battery Energy Storage System*, no. December. 2018.
- [20] E. Hsieh and R. Johnson, "Frequency Response from Autonomous Battery Energy Storage," *2012 Grid Futur. Symp.*, pp. 1–7, 2012.
- [21] DIgSILENT GmbH, "DIgSILENT PowerFactory Application Example Battery Energy Storing Systems," *Batter. Energy Storing Syst.*, pp. 1–28, 2010.
- [22] Y. K. Wu and K. T. Tang, "Frequency support by BESS – Review and analysis," *Energy Procedia*, vol. 156, no. September 2018, pp. 187–198, 2019.
- [23] H. Chen, Y. Xu, C. Liu, F. He, and S. Hu, *Storing Energy in China-An Overview*. Elsevier Inc., 2016.
- [24] M. Faisal, M. A. Hannan, P. J. Ker, A. Hussain, M. Bin Mansor, and F. Blaabjerg, "Review of energy storage system technologies in microgrid applications: Issues and challenges," *IEEE Access*, vol. 6, no. 1, pp. 35143–35164, 2018.
- [25] X. Fan *et al.*, "Battery Technologies for Grid-Level Large-Scale Electrical Energy Storage," *Trans. Tianjin Univ.*, vol. 26, no. 2, pp. 92–103, 2020.
- [26] M. Morris, "Comparison of Rechargeable Battery Technologies," *ASME Early Career Tech. J.*, no. November 2012, pp. 1-5,7, 2012.
- [27] D. Akinyele, J. Belikov, and Y. Levron, "Battery storage technologies for electrical applications: Impact in stand-alone photovoltaic systems," *Energies*, vol. 10, no. 11, 2017.
- [28] K. Mongird *et al.*, "Energy storage technology and cost characterization report," *Pacific Northwest Natl. Lab.*, no. July, pp. 1–120, 2019.
- [29] National Grid, "Enhanced Frequency Control Capability (EFCC)," no. June, 2015.
- [30] R. Wagner, "Large lead/acid batteries for frequency regulation, load levelling and solar power applications," *J. Power Sources*, vol. 67, no. 1–2, pp. 163–172, 1997.
- [31] North American Electric Reliability Corporation, "Primary Frequency Control Reliability Guideline," no. September, 2018.
- [32] X. Huang, K. Wang, G. Li, and H. Zhang, "Virtual inertia-based control strategy of two-stage photovoltaic inverters for frequency support in islanded micro-grid," *Electron.*, vol. 7, no. 11, 2018.
- [33] ENTSO-e, "Supporting Document for the Network Code on Operational Security,"

- ENTSO-e *Publ.*, no. September, pp. 1–178, 2013.
- [34] ENTSO-E, “P1: Load-Frequency Control and Performance,” *Cont. Eur. Oper. Handb.*, no. Cc, pp. P1-1-P1-32, 2009.
- [35] PT. Perusahaan Listrik Negara (Persero) P2B Bidang Perencanaan, “Merit Order Pembangkit Mengacu Rencana Operasi Tahunan 2019.” 2019.
- [36] Menteri Energi dan Sumber Daya Mineral Republik Indonesia, *Peraturan Menteri Energi dan Sumber Daya Mineral Republik Indonesia Nomor 12 tahun 2017 tentang Pemanfaatan Sumber Energi Terbarukan untuk Penyediaan Tenaga Listrik*. 2017.
- [37] Menteri Energi dan Sumber Daya Mineral Republik Indonesia, *Keputusan Menteri ESDM Republik Indonesia No. 55 tahun 2019 tentang Biaya Pokok Penyediaan Pembangkitan PT PLN (Persero) tahun 2018*. 2019.
- [38] Sekretariat Perusahaan PT PLN (Persero), “Buku Statistik PLN 2018,” *Sekr. Perusah. PT PLN*, vol. 53, no. 9, pp. 1689–1699, 2019.
- [39] T. S. Brinsmead and J. A. Hayward, “Future energy storage trends,” no. October, 2015.
- [40] “Kurs Rupiah Indonesia - Dolar Amerika Serikat - Riwayat Kurs.” [Online]. Available: <https://id.exchange-rates.org/history/IDR/USD/T>. [Accessed: 17-May-2020].
- [41] P. N. Vinotha, K. Xavier, S. Muthukumar, M. T. Student, and I. Technology, “Frequency Regulation By Free Governor Mode of Operation in Power Stations,” *IEEE Int. Conf. Comput. Intell. Comput. Res.*, vol. 4, no. May, pp. 1–5, 2010.
- [42] ENTSO-E, “Rate of Change of Frequency (ROCOF) withstand capability,” no. January, 2018.