

## DAFTAR PUSTAKA

- [1] Q. Yang, R. Wang, W. Sima, C. Jiang, X. Lan, and M. Zahn, “Electrical circuit flashover model of polluted insulators under ac voltage based on the arc root voltage gradient criterion,” *Energies (Basel)*, vol. 5, no. 3, pp. 752–769, 2012, doi: 10.3390/en5030752.
- [2] J. Zhang, T. Xiao, M. Li, and Y. Zhou, “Deep-Learning-Based Detection of Transmission Line Insulators,” *Energies (Basel)*, vol. 16, no. 14, 2023, doi: 10.3390/en16145560.
- [3] Y. Zhang, Y. Dou, K. Yang, X. Song, J. Wang, and L. Zhao, “Insulator defect detection based on BaS-YOLOv5,” *Multimed. Syst.*, vol. 30, no. 4, pp. 1–15, 2024, doi: 10.1007/s00530-024-01413-w.
- [4] B. B. S. D. A. Harsono, A. S. Surya, K. G. H. Mangunkusumo, and A. P. Purnomoadi, “Karakteristik Petir Indonesia Dan Penggunaannya Dalam Evaluasi Unjuk Kerja Saluran Udara 150 KV Saat Terjadi Sambaran Petir,” *Jurnal Technopreneur (JTech)*, vol. 9, no. 1, pp. 46–53, 2021, doi: 10.30869/jtech.v9i1.726.
- [5] Erhaneli, Z. Anthony, and R. Vandeska, “Analisis Jumlah Gangguan Petir Akibat Back flashover Dengan Metode Hilemen Pada SUTT 150 kV Gardu Induk Payakumbuh-Koto Panjang,” *Jurnal Teknik Elektro Institut Teknologi Padang*, vol. 11, no. 2, pp. 57–63, 2022, doi: 10.21063/JTE.2022.31331109.
- [6] A. Junaidi, A. Y. Tegar, M. Risma, and A. Nugroho, “Analisis Shielding Failure Pada SUTT 150 kV Gandul-Serpong Menggunakan Metode Elektromeometri,” *Jurnal Ilmiah SUTET*, vol. 15, no. 1, pp. 11–24, 2025, doi: 10.33322/sutet.v15i1.2736.
- [7] A. Mubarak, H. Fitrianto, and K. Edwar, “Analisis Statistik Gangguan Akibat Sambaran Petir yang Terjadi pada Saluran Transmisi Di PLN Unit Pelaksana Transmisi (UPT) Semarang,” *Jurnal Energi dan Ketenagalistrikan*, vol. 1, no. 2, pp. 145–156, 2023.
- [8] C. Kajonwattanukul and W. Skolpap, “Development of C.B.T hot end yoke device for hot line insulator replacement of 230-kV double suspension string for two bundles with arcing horn,” *Adv. Mat. Res.*, vol. 931–932, no. May 2014, pp. 862–866, 2014, doi: 10.4028/www.scientific.net/AMR.931-932.862.

- [9] E. Criyanto, Supriyatna, and A. B. Muljono, “Analisis Koordinasi Isolasi di Gardu Induk Kuta Terhadap Tegangan Lebih Akibat Sambaran Petir Pada Saluran Transmisi 150 KV,” *Dielektrika*, vol. 7, no. 1, pp. 64–72, 2020.
- [10] Y. R. R. Chen and P. J. Schulz, “The effect of information communication technology interventions on reducing social isolation in the elderly: A systematic review,” *J. Med. Internet Res.*, vol. 18, no. 1, 2016, doi: 10.2196/jmir.4596.
- [11] E. A. B. De Moraes, P. KC, and M. Zayernouri, “A Thermo-Electro-Mechanical Model for Long-Term Reliability of Aging Transmission Lines,” pp. 1–32, 2024.
- [12] A. Ali *et al.*, “Performance analysis of high voltage disc insulators with different profiles in clean and polluted environments using flashover, withstand voltage tests and finite element analysis,” *Sci. Rep.*, vol. 14, no. 1, pp. 1–26, 2024, doi: 10.1038/s41598-024-71392-5.
- [13] N. G. Pahiyanti, S. Sukmajati, and A. Malik, “Nilai Tahanan Kontak Pada PMS BAY Cengkareng Terhadap Rugi Daya Di Gardu Induk Duri Kosambi,” *SUTET*, vol. 11, no. 2, pp. 61–70, Dec. 2021, doi: 10.33322/sutet.v11i2.1557.
- [14] I. Hajar and M. H. Pratama, “Tenaga Listrik Pada Penyulang Cahaya PT . PLN (Persero ),” *Jurnal Ilmiah*, vol. 10, no. 1, pp. 70–77, 2018.
- [15] R. Fan, W. Zeng, Z. Ming, W. Zhang, R. Huang, and J. Liu, “Risk Reliability Assessment of Transmission Lines under Multiple Natural Disasters in Modern Power Systems,” *Energies (Basel)*, vol. 16, no. 18, pp. 1–14, 2023, doi: 10.3390/en16186548.
- [16] M. Monemi, S. M. Shahrtash, and M. Kalantar, “Failure probability and location identification of damaged insulators using normal function and monitored leakage current,” *PLoS One*, vol. 20, no. 6 June, pp. 1–27, 2025, doi: 10.1371/journal.pone.0314708.
- [17] C. Fang *et al.*, “Mapping Relation of Leakage Currents of Polluted Insulators and Discharge Arc Area,” *Front. Energy Res.*, vol. 9, no. November, pp. 1–9, 2021, doi: 10.3389/fenrg.2021.777230.

- [18] J. Chen, X. Zhao, K. Shi, Z. Ao, and X. Zheng, "Reliability Analysis of Transmission Tower Based on Unscented Transformation Under Ice and Wind Loads," *Energies (Basel)*, vol. 17, no. 22, 2024, doi: 10.3390/en17225604.
- [19] B. Dhamala and M. Ghassemi, "Transmission expansion planning with high surge impedance loading lines at reduced voltage levels," *Journal of Modern Power Systems and Clean Energy*, no. September, 2025, doi: 10.35833/MPCE.2024.001149.
- [20] B. Dhamala and M. Ghassemi, "An Extra-High Voltage Test System for Transmission Expansion Planning Studies Considering Single Contingency Conditions," *Electronics (Switzerland)*, vol. 13, no. 19, 2024, doi: 10.3390/electronics13193937.
- [21] N. G. Pahiyanti and S. Sukmajati, "Penggunaan Pernafasan Pintar (Smart Breather) Pada Transformator Dibandingkan Dengan Pernafasan Konvensional," *SUTET*, vol. 12, no. 2, pp. 54–61, Jan. 2023, doi: 10.33322/sutet.v12i2.1668.
- [22] N. G. Pahiyanti and S. Sukmajati, "Pengujian Transformator Distribusi Tiga Fasa," *Jurnal Sutet*, vol. 6, no. 2, pp. 54–60, 2016.
- [23] B. Dhamala and M. Ghassemi, "Smart Transmission Expansion Planning Based on the System Requirements: A Comparative Study with Unconventional Lines," *Energies (Basel)*, vol. 17, no. 8, 2024, doi: 10.3390/en17081912.
- [24] L. Dal Bo, P. Gardonio, N. Battistella, and E. Turco, "Non-linear Isolator for Vibration and Force Transmission Control of Unbalanced Rotating Machines," *Journal of Vibration Engineering and Technologies*, vol. 11, no. 4, pp. 1741–1764, 2023, doi: 10.1007/s42417-022-00668-9.
- [25] G. Adinolfi, R. Ciavarella, G. Graditi, A. Ricca, and M. Valenti, "Innovative Method for Reliability Assessment of Power Systems: From Components Modeling to Key Indicators Evaluation," *Electronics (Switzerland)*, vol. 13, no. 2, 2024, doi: 10.3390/electronics13020275.
- [26] F. Fahim and M. S. Hasan, "Enhancing the reliability of power grids: A YOLO based approach for insulator defect detection," *e-Prime - Advances in Electrical Engineering*,

*Electronics and Energy*, vol. 9, no. June, p. 100663, 2024, doi: 10.1016/j.prime.2024.100663.

- [27] M. J. Shodik and I. Hajar, “Evaluasi Nilai Setting Rele Jarak Sebagai Proteksi Saluran Udara Tegangan Tinggi 150 KV Menggunakan DigSilent Power Factory,” vol. 14, no. 1, 2024, doi: 10.33322/sutet.v14i1.2291.
- [28] N. G. Pahiyanti and S. Soewono, “Studi Harmonik Pada Sumber Listrik Akibat Penggunaan Lampu LED, LHE, dan TL,” *Jurnal Energi dan Kelistrikan*, vol. 7, no. 1, pp. 28–40, 2015.
- [29] Fathurrohman, “Optimasi Pemasangan TLA (Transmission Line Arrester) untuk Mengurangi Gangguan Petir Pada SUTT 150 kV Gilimanuk-Celukan Bawang-Pemarong,” Institut Teknologi Bandung, 2024.
- [30] R. N. R. Ghaly *et al.*, “Impact of atmospheric conditions on the flash-over voltage of the transmission line insulators using central composite design,” *Sci. Rep.*, vol. 14, no. 1, pp. 1–16, 2024, doi: 10.1038/s41598-024-72815-z.
- [31] R. Mohan, F. Saleem, K. Voderhobli, and A. Sheikh-Akbari, “Ensuring Sustainable Digital Inclusion among the Elderly: A Comprehensive Analysis,” *Sustainability (Switzerland)*, vol. 16, no. 17, 2024, doi: 10.3390/su16177485.
- [32] Z. Li, J. Xu, K. Wang, P. Wu, and G. Li, “FPGA-based real-time simulation for EV station with multiple high-frequency chargers based on C-EMTP algorithm,” *Protection and Control of Modern Power Systems*, vol. 5, no. 1, 2020, doi: 10.1186/s41601-020-00171-x.
- [33] W. Y. Pratama and N. G. Pahiyanti, “Analisa Penanganan Saluran Transmisi Tenaga Listrik Akibat Back Flashover,” Institut Teknologi PLN, 2025.
- [34] R. Zoro, G. K. Atmajaya, and B. Denov, “Lightning Protection System for High Voltage Transmission Line in Indonesia,” in *Proceedings of the 2nd International Conference on High Voltage Engineering and Power Systems (ICHVEPS) 2019*, Bali, 2019.

- [35] CIGRE Working Group C4.23, *Procedures for Estimating the Lightning Performance of Transmission Lines – New Aspects*, CIGRE Technical Brochure No. 839, Paris: CIGRE, June 2021.