

DAFTAR PUSTAKA

- [1] A. Hasankhani, S. M. Hakimi, M. Bisheh-Niasar, M. Shafie-khah, and H. Asadolahi, "Blockchain technology in the future smart grids: A comprehensive review and frameworks," *Int. J. Electr. Power Energy Syst.*, vol. 129, p. 106811, 2021.
- [2] G. Rosyadi, R. Syahputra, and F. Mujaahid, "Electrical Power Distribution Network Reliability: A Case Study in Wates Substation, Yogyakarta, Indonesia," *J. Electr. Technol. UMY*, vol. 2, no. 2, pp. 52–58, 2018, doi: 10.18196/jet.2234.
- [3] S. Homan and S. Brown, "An analysis of frequency events in Great Britain," *Energy Reports*, vol. 6, pp. 63–69, 2020.
- [4] R. dan T. Direktorat Jenderal Pendidikan Tinggi, "1000 Karya Unggulan Anak Bangsa MATCHING FUND," pp. 1–88, 2022.
- [5] H. A. A. Al Asadi and A. A. J. Chlahawi, "Design and Implementation of Iot Scada System Based on Open Channel Flow," *Int. J. Tech. Phys. Probl. Eng.*, vol. 15, no. 2, pp. 149–154, 2023.
- [6] M. S. W. Pratama, E. Tridianto, and P. D. Permatasari, "Monitoring Renewable Energy Dengan Konsep Mini SCADA Menggunakan IoT," *Sentikuin*, vol. 2, pp. 1–6, 2019, [Online]. Available: <https://pro.unitri.ac.id/index.php/sentikuin/article/view/136>
- [7] D. Mahadian, "Perancangan SCADA pada Mini Plant Proses Pengendalian Level," *J. Telekomun. dan Komput.*, vol. 6, no. 2, p. 161, 2017, doi: 10.22441/incomtech.v6i2.1154.
- [8] M. A. Gumelar B and E. Ariyanto, "Implementasi Scada Untuk Monitoring Dan Controlling Serta Koordinasi Sistem Proteksi Gardu Induk Sistem 1,5 Breaker Pada Gardu Induk Tegangan Ekstra Tinggi Berbasis Arduino Mega 2560 Dengan Tampilan Hmi," *Gema Teknol.*, vol. 19, no. 3, p. 14, 2017, doi: 10.14710/gt.v19i3.21880.
- [9] O. E. Oyefusi and J. A. Akinwumi, "Design and Construction of Automatic Transfer Switch using Programmable Logic Controller (PLC)," in *2024 IEEE 5th International Conference on Electro-Computing Technologies for Humanity (NIGERCON)*, IEEE, 2024, pp. 1–5.
- [10] A. F. Saransari, F. Dehghanisani, and M. T. Iqbal, "Design and Implementation of SCADA Architecture Based on MATLAB App Designer for a Hybrid Power System," *J. Electron. Electr. Eng.*, pp. 474–487, 2024.
- [11] R. Khan, "Modeling and validation of overcurrent and earth-fault protection schemes with relay integration in a Hardware-in-the-Loop (HiL)

framework,” 2025.

- [12] E. Terciyanlı, H. Koroğlu, A. Kutlay, C. Korkmaz, and Z. Güneş, “Volt-VAr Management System,” *Orclever Proc. Res. Dev.*, vol. 5, pp. 338–346, Dec. 2024, doi: 10.56038/oprd.v5i1.547.
- [13] W. He, “Design of supervisory controllers and ultra-low power data loggers for hybrid power systems,” 2024, *Memorial University of Newfoundland*.
- [14] I. S. Pakerti, “Perancangan Miniatur Reliability Sistem Jaringan Tegangan Menengah 20 kV Menggunakan Sistem SCADA,” *Univ. Muhammadiyah Jember*, pp. 1–14, 2020.
- [15] B. E. Prasetyo, W. Hayuhardhika, N. Putra, D. Syauqy, and A. Bhawiyuga, “Sistem Monitoring Trafo Distribusi PT . PLN (Persero) Berbasis IoT,” *J. Teknol. Inf. dan Ilmu Komput.*, vol. 7, no. 1, pp. 205–210, 2020, doi: 10.25126/jtiik.202071951.
- [16] I. Hajar and M. H. Pratama, “Analisa Nilai SAIDI SAIFI sebagai indeks keandalan penyediaan tenaga listrik pada penyulang Cahaya PT. PLN (Persero) area Ciputat,” *Energi dan Kelistrikan*, vol. 10, no. 1, pp. 70–77, 2018.
- [17] N. J. Hontong, M. Tuegeh, and L. Patras, “Analisa Rugi Rugi Daya Pada Jaringan Distribusi di PT. PLN Palu,” *J. Tek. Elektro dan Komput.*, vol. 4, no. 1, pp. 64–71, 2015.
- [18] A. Muhammad, H. Tumaliang, and S. Silimang, “Analisa Rugi-Rugi Energi Listrik pada Jaringan Distribusi (JTM) di PT PLN (Persero) Area Gorontalo,” *J. Tek. Elektro dan Komput.*, vol. 7, no. 3, pp. 295–302, 2018.
- [19] P. Bunga, M. Pakiding, and Silimang Sartje, “Perancangan Sistem Pengendalian Beban Dari Jarak Jauh Menggunakan Smart Relay,” *J. Tek. Elektro dan Komput. Univ. Sam Ratulangi Manad.*, vol. 4, no. 5, pp. 65–75, 2015.
- [20] I. Puspitasari and M. R. Agustin, “Studi Kasus Simulasi Konfigurasi Jaringan Scada Antara Gedung A dan Gedung B Menggunakan Aplikasi Cisco Packet Tracer,” *J. Tek. Mesin, Ind. Elektro Dan Inform.*, vol. 2, no. 2, pp. 16–24, 2023.
- [21] C. Bunyamin and dan K. Nurwijayanti N, “Sistem Pengontrol Fungsi Gardu Listrik Menggunakan PLC dengan Remote Control Di Lenteng Agung,” *Tesla*, vol. 16, no. 2, p. 133, 2014.
- [22] D. Mardian, M. Sibarani, and T. Susila, “Analisis Desain Implementasi Teknologi Komunikasi VSAT Dan Long Term Evolution (LTE) Pada Sistem Smart Grid,” *J. Tesla*, vol. 16, no. 1, pp. 81–89, 2014.

- [23] I. Gede, D. Saputra, A. Sofwan, and R. Rizal Isnanto, “Desain Proteksi Kubikel 20 kV pada Gardu Distribusi Pelanggan Tegangan Menengah di PT PLN (Persero) Unit Pelaksana Pelayanan Pelanggan (UP3) Bali Utara,” *Jpii*, vol. 2, no. 4, pp. 232–237, 2024, [Online]. Available: <https://doi.org/10.14710/jpii.2024.24575>
- [24] A. Zulatama, P. Prasasti, and Sarmidi, “Upgrade System Control Conveyor Coal (CC) 10 Dengan Mengintegrasikan PLC LOGO! 0BA8 Dengan PLC Schneider Quantum 11302 di Tambang Air Laya PT Bukit Asam Tbk,” *JITS*, vol. 2, no. 1, pp. 39–46, 2024.
- [25] F. Funan and W. Utama, “Evaluasi Keandalan Sistem Distribusi Tenaga Listrik Berdasarkan Indeks Keandalan SAIDI dan SAIFI pada PT PLN (PERSERO) Rayon Kefamenanu,” *J. Ilm. Telsinas Elektro, Sipil dan Tek. Inf.*, vol. 3, no. 2, pp. 32–36, 2020.
- [26] A. A. Monika, B. Badriana, and M. A. Muthalib, “Analisa Dan Evaluasi Penggunaan Scada Pada Keandalan Sistem Distribusi Pt.Pln (Persero) Up2D Banda Aceh,” *J. Energi Elektr.*, vol. 9, no. 2, p. 8, 2021, doi: 10.29103/jee.v9i2.3892.
- [27] J. F. Kusuma, M. Rifa, and I. Saukani, “Implementasi Protokol Komunikasi Modbus Untuk Mini Scada Pada Plant Pengisian Serbuk Temulawak,” *MUTIARA*, vol. 2, no. 5, pp. 314–326, 2024.
- [28] R. H. Annuru and I. Abdi Bangsa, “Optimalisasi Manuver Jaringan Menggunakan Supervisory Control And Data Aquisition (SCADA) Dalam Meningkatkan Keandalan Sistem Distribusi 20 KV Di PT PLN (Persero) UP3 BEKASI,” *Aisyah J. Informatics Electr. Eng.*, vol. 6, no. 1, pp. 56–66, 2024, doi: 10.30604/jti.v6i1.167.
- [29] S. A. Nugroho, “Analisis Optimasi Keandalan Melalui Looping 3 IBT Di Subsistem Cilegon Menuju Zero Blackout Provinsi Banten,” *J. ELEKTRO*, vol. 9, no. 2, pp. 133–148, 2021.
- [30] A. Tirtayasa and M. A. Satria, “Jaringan telekomunikasi pada scada menggunakan cisco packet tracker,” *J. Penelit. Mhs.*, vol. 2, no. 2, pp. 188–196, 2023.
- [31] W. P. Putra *et al.*, “Rancang Bangun Alat Monitoring Daya Listrik Real-Time Berbasis ESP32, Sensor PZEM 004T dan INA 219 Dengan Interface LabVIEW,” *J. Inov.*, vol. 8, no. 1, pp. 25–29, 2025.
- [32] A. S. Suli and A. Bintoro, “Rancang Bangun Sistem Pengaturan Dan Pengukuran Daya Listrik Berbasis Mini Scada Dengan LabVIEW Dan Arduino” 2022.
- [33] A. Syhari and A. Bintoro, “Monitoring dan controlling daya berbasis Arduino Uno menggunakan Sensor PZEM-004T,” *J. Energi Elektr.*, vol.

12, no. 1, pp. 43–51, 2023.

- [34] N. K. Prabowo and I. Irwanto, “The Implementation of Arduino Microcontroller Boards in Science: A Bibliometric Analysis from 2008 to 2022,” *J. Eng. Educ. Transform.*, vol. 37, no. 2, pp. 106–123, 2023, doi: 10.16920/jeet/2023/v37i2/23154.