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DAFTAR PUSTAKA

Afandi, A.N. (2005), *Sistem Tenaga Listrik Operasi Sistem Dan Pengendalian*. Teknik Elektro Universitas Negeri Malang, Malang.

Ahmad, F., Iqbal, A., Ashraf, I., Marzband, M. and khan, I. (2022), Optimal location of electric vehicle charging station and its impact on distribution network: A review, *Energy Reports Elsevier Ltd*, Vol. 1 November, 2314-2333, doi: 10.1016/j.egyr.2022.01.180.

Banegas, J. and Mamkhezri. (2021), A Systematic Review of Geographic Information Systems Based Methods and Criteria Used for Electric Vehicle Charging Station Site Selection. *Environ Sci Pollut Res*, 30, 68054–68083, https://doi.org/10.1007/s11356-023-27383-6.

BMKG. (2021), Penyinaran Matahari-BPS cilacap, Stasiun Meteorologi Bandara Tunggul Wulung, Cilacap, 1-1, *https://shorturl.at/fmuQ4*, diakses 25 Februari 2023.

Chaudhari, K., Kandasamy, N.K., Krishnan, A., Ukil, A. and Gooi, H.B. (2019), "Agent-based aggregated behavior modeling for electric vehicle charging load", *IEEE Transactions on Industrial Informatics IEEE Computer Society*, 2, Vol. 15, 856–868, doi: 10.1109/TII.2018.2823321.

Chi Minh City, H., Trung Ward, L., Duc District, T., Thi Bich Tuyen, N., Tien Dat, H., Ngoc Phuc Diem, N. and Quang Binh, L. (2022), Research of Distribution Network Reliability Assessment by ETAP Software, *GMSARN International Journal*, Vol. 16, 33-46.

Europian Commision. (2022), Photovoltaic Geographical Information System, *https://re.jrc.ec.europa.eu/pvg_tools/en/*, diakses 23 Mei 2023.

Falah, M.Y., Arrasyid, A.M., Ulfa, A.N., Ahmad, R.Z. and Putra, J.T. (2021), Dampak Distributed Energy Resources Terhadap Profil Tegangan Dan Rugi Daya Penyulang Bantul 05, *Jurnal Edukasi Elektro*, 2, Vol. 05, 70-79.

Genevois, M.E. and Kocaman, H. (2018), Locating Electric Vehicle Charging Stations in Istanbul with AHP Based Mathematical Modelling, *International Journal of Transportation System*. Vol. 3, 1-10.

Ghodusinejad, M.H., Noorollahi, Y. and Zahedi, R. (2022), Optimal site selection and sizing of solar EV charge stations, *Journal of Energy Storage*. Vol. 56, 1-19.

Guaita-Pradas, I., Marques-Perez, I., Gallego, A. and Segura, B. (2019), Analyzing territory for the sustainable development of solar photovoltaic power using GIS databases, *Environmental Monitoring and Assessment Springer*, 12, 191, 1-18, doi: 10.1007/s10661.

Hakim, I.A., Suraharta, I.M. and Raharjo, E.P. (2022), Perencanaan Lokasi Stasiun Pengisian Kendaraan Listrik Umum (SPKLU) Untuk Mendukung Percepatan Penggunaan Kendaraan Listrik Bertenaga Baterai di Kabupaten Jepara, *PTDI-STTD*, 1-19, http://digilib.ptdisttd.net/id/eprint/1937.

UNIVERSITAS GADJAH MADA
Perencanaan Penempatan Sistem Pengisian Kendaraan Listrik Umum (SPKLU) Menggunakan Metode Analytical Hierarcy Process (AHP) Disertai Analisis Dampak Integrasi PLTS Pada SPKLU Studi Kasus: Penyulang KSG02 PLN ULP Kroya
Muhammad Yusuf Falah, Suhono, S.T., M. Eng.
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Hayrapetyan, L.R. (2019), Random Consistency Indices For Analytic Hierarchy Processes, *International Journal of Business, Marketing, and Decision Sciences*, 1, 12, 31-36.

Heizer, J. and Render, B. (2014), *Operation Management*. Edisi 11, Pearson Education, USA.

Himabindu, N., Hampannavar, S., Deepa, B. and Swapna, M. (2021), "Analysis of microgrid integrated Photovoltaic (PV) Powered Electric Vehicle Charging Stations (EVCS) under different solar irradiation conditions in India: A way towards sustainable development and growth", *Energy Reports Elsevier Ltd*, 7, 8534–8547, doi: 10.1016/j.egyr.2021.10.103.

Ho, W. and Ma, X. (2018), The state-of-the-art integrations and applications of the analytic hierarchy process, *European Journal of Operational Research Elsevier B.V.*, 1 June, 1-16, doi: 10.1016/j.ejor.2017.09.007.

Hontong, N.J., Tuegeh, M. and Patras, L.S. (2015), Analisa Rugi –Rugi Daya Pada JaringanDistribusi Di PT. PLN Palu, *E-Journal Teknik Elektro Dan Komputer*, 1, 14, 64-71, https://ejournal.unsrat.ac.id/index.php/elekdankom/article/view/6739.

Jacob, A.S. (2021), Rooftop Solar-Based EV Charging in India: A Techno-Economic Comparison, *2021 13th IEEE PES Asia Pacific Power & Energy Engineering Conference (APPEEC)*, 2021-November, 1-6, doi: 10.1109/APPEEC50844.2021.9687758.

Jaya, A. and Ashad, B.A. (2020), Analisis Rugi-Rugi Daya Jaringan Distribusi Penyulang POLDA Area Makassar Utara Dengan Menggunakan ETAP 12.6, *Jurnal Ilmiah Teknik Elektro*, 1, 7, 51-54.

Kementrian ESDM. (2018), *Instalasi Pembangkit Listrik Tenaga Surya Dos & Don'ts*, Energising Development (EnDev) Indonesia, Jakarta.

Khalid, R., Jayamani, E., Soon, K.H., Prashanth PVS, H., Jeyanthi, S. and Ravi Sankar, R. (2022), Selection of green composite materials for orthopedic prosthesis using analytical hierarchy process, *Materials Today: Proceedings Elsevier Ltd*, P12, Vol. 62, 6857–6863, doi: 10.1016/j.matpr.2022.05.063.

Krishnamoorthy, G. and Dubey, A. (2020), Transmission-Distribution Cosimulation: Analytical Methods for Iterative Coupling, *IEEE Systems Journal*, 2, Vol. 14 2633–2642, doi: 10.1109/JSYST.2019.2931201.

Kumar, R.S., Raghunatha, T. and Deshpande, R.A. (2018), Segregation of technical and commercial losses in an 11 kV feeder, *2018 7th IEEE GCC Conference and Exhibition, GCC 2018*, 76–79, doi: 10.1109/IEEEGCC.2018.6705752.

Kunj, T. and Pal, Dr.K. (2020), Optimal Location Planning of EV Charging Station in Existing Distribution Network with Stability Condition, *7th International Conference on Signal Processing and Integrated Networks (SPIN)*, 7, 1060-1065.

Perencanaan Penempatan Sistem Pengisian Kendaraan Listrik Umum (SPKLU) Menggunakan Metode Analytical
Hierarcy Process (AHP) Disertai Analisis Dampak Integrasi PLTS Pada SPKLU Studi Kasus: Penyulang
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Muhammad Yusuf Falah, Suhono, S.T., M. Eng.
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Lal Meghwar, S., Ali Shaikh, F., Khuwaja, Z., Arain, J., Ali, R. and Ali Jatoi, M. (2018), Accuracy Measurement of Google Earth Using GPS and Manual Calculations, *Research Gate*, 1-10, https://www.researchgate.net/publication/323292318.

Lefer, T.B., Anderson, M.R., Fornari, A., Lambert, A., Fletcher, J. and Baquero, M. (2018), Using Google Earth as an Innovative Tool for Community Mapping Using Google Earth for Community Mapping, *Public Health Reports*, Vol. 123, 1-6.

Liu, J. peng, Zhang, T. xi, Zhu, J. and Ma, T. nan. (2018), Allocation optimization of electric vehicle charging station (EVCS) considering with charging satisfaction and distributed renewables integration, *Energy Elsevier Ltd*, Vol. 164, 60–574, doi: 10.1016/j.energy.2018.09.028.

Luo, L., Wu, Z., Gu, W., Huang, H., Gao, S. and Han, J. (2020), Coordinated allocation of distributed generation resources and electric vehicle charging stations in distribution systems with vehicle-to-grid interaction, *Energy Elsevier Ltd*, Vol. 192, 1-2, doi: 10.1016/j.energy.2019.116631.

Manalu, J.T., Panggabean, S.M., Napitupulu, J., Sinaga, J. and Jumari. (2023), Analisa Rugi-Rugi Daya Pada Saluran Distribusi Tegangan Menengah 20 Kv Di PT. PLN (Persero) UP3 Sibolga", *Jurnal Teknologi Energi Udayana*, 1, 12, 14–23.

Marniati, Y. (2018), Evaluasi Susut Daya Penyulang Cendana 20 kV Pada Gardu Induk Bungaran Dengan ETAP 12.6, *Jurnal Teknik Elektro ITP*, 1, 7, 79–92, doi: 10.21063/JTE.2018.3133712.

Menteri ESDM. (2017), *Permen ESDM Nomor 12 Tahun 2017*, Kementrian ESDM, Jakarta.

Menteri ESDM. (2021), *Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) PT. PLN (Persero)*, PT. PLN (Persero), Jakarta.

Mokarram, M., Mokarram, M.J., Khosravi, M.R., Saber, A. and Rahideh, A. (2020), Determination of the optimal location for constructing solar photovoltaic farms based on multi-criteria decision system and Dempster–Shafer theory, *Scientific Reports Nature Research*, 1, 10, 1-3, doi: 10.1038/s41598-020-65165-z.

Najmurrokhman, A., Fakhri, Z. and Reza, M. (2017), Pengembangan Pembangkit Listrik Tersebar Energi Baru Terbarukan dan Konversi Energi, *Research Gate*, *1-5*. doi:10.31219/osf.io/kr3wa.

Nornagoro, A., Banjar-Nahor, K.M., Rahman, F.S., Rahmani, R. and Hariyanto, N. (2020), Impact of combined electric vehicle and PV parking lot to reliability of distribution network systems and its mitigations, *Proceeding - 2nd International Conference on Technology and Policy in Electric Power and Energy ICT-PEP 2020*, *3*, *9*, 283–288, doi: 10.1109/ICT-PEP50916.2020.9249941.

Perencanaan Penempatan Sistem Pengisian Kendaraan Listrik Umum (SPKLU) Menggunakan Metode Analytical
Hierarcy Process (AHP) Disertai Analisis Dampak Integrasi PLTS Pada SPKLU Studi Kasus: Penyulang
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Muhammad Yusuf Falah, Suhono, S.T., M. Eng.
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Operation Technology Inc. (2019), *ETAP 19 User Guide*, Operation Technology, California.

Paired Power. (2023), Paired Power Sun Driven, https://www.pairedpower.com/, diakses 8 Maret 2023.

Parhusip, J. (2019), Penerapan Metode Analytical Hierarchy Process (AHP) Pada Desain Sistem Pendukung Keputusan Pemilihan Calon Penerima Bantuan Pangan Non Tunai (BPNT) Di Kota Palangka Raya, *Jurnal Teknologi Informasi*, 1, 4, 1-8.

Pranoto, S. and Natasya Rusli, N. (2020), Penyeimbangan Beban Pada Trafo Distribusi Penyulang Akkarena Di Unit Layanan Pelanggan Mattoanging PT PLN (Persero), *Prosiding SNTEI 2020*, 2, 3, 1-3, http://jurnal.poliupg.ac.id/index.php/sntei/article/view/.

Presiden RI. (2019), *Peraturan Presiden No. 55 Tahun 2019*, Kementrian Sekretariat Negara RI, Jakarta.

Presiden RI. (2022), *Instruksi Presiden Nomor 7 Tahun 2022*, Kementrian Sekretariat Negara RI, Jakarta.

PT. PLN (Persero). (2017), *SPLN D3.030 2017*, PT. PLN (Persero), Jakarta.

Razmjoo, A., Gakenia Kaigutha, L., Vaziri Rad, M.A., Marzband, M., Davarpanah, A. and Denai, M. (2021), A Technical analysis investigating energy sustainability utilizing reliable renewable energy sources to reduce CO2 emissions in a high potential area, *Renewable Energy Elsevier Ltd*, Vol. 164, 46–57, doi: 10.1016/j.renene.2020.09.042.

Risen energy CC., L. (2023), Risen Solar Technology, https://sun-energy.com.ua/, diakses 10 Maret 2023.

Dos Santos, P.H., Neves, S.M., Sant'Anna, D.O., Oliveira, C.H. de and Carvalho, H.D. (2019), The analytic hierarchy process supporting decision making for sustainable development: An overview of applications, *Journal of Cleaner Production Elsevier Ltd*, 1 March, doi: 10.1016/j.jclepro.2018.11.270.

Suswanto, D. (2009), *Sistem Distribusi Tenaga Listrik*, Jurusan Teknik Elektro FT Universitas Negeri Padang, Padang.

Tan, D. and Seng, A.K. (2018), *Handbook for Solar Photovoltaic (PV) Systems Contents*, Energy Market Authority, Singapore.

Teluguntla, P., Thenkabail, P., Oliphant, A., Xiong, J., Gumma, M.K., Congalton, R.G., Yadav, K., *et al.* (2018), A 30-m landsat-derived cropland extent product of Australia and China using random forest machine learning algorithm on Google Earth Engine cloud computing platform, *ISPRS Journal of Photogrammetry and Remote Sensing Elsevier B.V.*, Vol. 144, 325–340, doi: 10.1016/j.isprsjprs.2018.07.017.

UNIVERSITAS GADJAH MADA
Perencanaan Penempatan Sistem Pengisian Kendaraan Listrik Umum (SPKLU) Menggunakan Metode Analytical Hierarcy Process (AHP) Disertai Analisis Dampak Integrasi PLTS Pada SPKLU Studi Kasus: Penyulang KSG02 PLN ULP Kroya
Muhammad Yusuf Falah, Suhono, S.T., M. Eng.
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Turan, M.T., Ates, Y., Erdinc, O. and Gokalp, E. (2019), Effect of Distributed Generation Based Campus Model Combined with Electric Vehicle Charging Stations on the Distribution Network, *2019 International Conference on Smart Energy Systems and Technologies (SEST)*, 1-5, doi: 10.1109/SEST.2019.8849132.

Turan, M.T. and Gökalp, E. (2022), Integration Analysis of Electric Vehicle Charging Station Equipped with Solar Power Plant to Distribution Network and Protection System Design, *Journal of Electrical Engineering and Technology*, 2, 17, 903–912, doi: 10.1007/s42835-021-00927-x.

Ulfa, A.N., Putra, J.T., Khomarudin, R. and Pradana, A. (2023), Optimization planning of distributed generation and electric vehicle charging station using flower pollination algorithm, *Proceedings of the 7th International Conference on Science and Technology*, Yogyakarta.

Vysocký, J., Foltyn, L., Brkić, D., Praksová, R. and Praks, P. (2022), Steady-State Analysis of Electrical Networks in Pandapower Software: Computational Performances of Newton–Raphson, Newton–Raphson with Iwamoto Multiplier, and Gauss– Seidel Methods, *Sustainability (Switzerland) MDPI*, 4, 14, 1-3, doi: 10.3390/su14042002.

Yan, J., Yu, D.C., Liu, Y., Wang, H. and Fu, Q. (2018), A new paradigm of maximizing the renewable penetration by integrating battery transportation and logistics: preliminary feasibility study, *2018 IEEE Power & Energy Society General Meeting (PESGM)*, 1-5, doi: 10.1109/PESGM.2018.8586691.

Yang, D.Y.C.W. (2019), Application of Google Earth in Power Network Planning, *2019 IEEE International Conference on Artificial Intelligence and Computer Applications (ICAICA)*, 130-134, doi: 10.1109/ICAICA.2019.8873432.

Zahedi, R., Ahmadi, A. and Dashti, R. (2021), Energy, exergy, exergoeconomic and exergoenvironmental analysis and optimization of quadruple combined solar, biogas, SRC and ORC cycles with methane system, *Renewable and Sustainable Energy Reviews Elsevier Ltd*, Vol. 150, 1-3 doi: 10.1016/j.rser.2021.111420.

Zhang, M. (2018), Location Planning of Electric Vehicle Charging Station, *IOP Conference Series: Materials Science and Engineering*, Vol. 394, 1-4, doi: 10.1088/1757-899X/394/4/042126.