

DAFTAR PUSTAKA

- [1] I. R. E. A. (IRENA), “Renewable energy highlights,” IRENA, Tech. Rep., July 2024, accessed: 29-01-2025. [Online]. Available: <https://www.irena.org/Publications/2024/Jul/Renewable-energy-statistics-2024>
- [2] REN21, “Renewables 2024 global status report: Energy supply,” REN21 Secretariat, Paris, Tech. Rep., 2024, accessed: 29-01-2025. [Online]. Available: <https://www.ren21.net/gsr-2024>
- [3] J. Ma, Z. Ling, W. Guan, and J. Xu, “Small-signal stability boundary analysis of grid-following inverters under weak grids by applying nonlinear modeling and lyapunov’s first method,” in *2023 4th International Conference on Advanced Electrical and Energy Systems (AEES)*, 2023, pp. 50–55.
- [4] Y. Ding, F. Gao, K. Hou, Y. Jiang, X. Zhong, and H. Yin, “Transient stability analysis and enhancement of an islanded microgrid with grid-forming converters and grid-following converters,” in *2024 4th Power System and Green Energy Conference (PSGEC)*, 2024, pp. 1362–1367.
- [5] P. Denholm, T. Mai, R. W. Kenyon, B. Kroposki, and M. O’Malley, “Inertia and the power grid: A guide without the spin,” National Renewable Energy Laboratory, Golden, CO, Tech. Rep. NREL/TP-6120-73856, 2020. [Online]. Available: <https://www.nrel.gov/docs/fy20osti/73856.pdf>
- [6] P. Wall, F. Gonzalez-Longatt, and V. Terzija, “Estimation of generator inertia available during a disturbance,” in *2012 IEEE Power and Energy Society General Meeting*, 2012, pp. 1–8.
- [7] J. Song, X. Zhou, Z. Zhou, Y. Wang, Y. Wang, and X. Wang, “Review of low inertia in power systems caused by high proportion of renewable energy grid integration,” *Energies*, vol. 16, no. 16, 2023. [Online]. Available: <https://www.mdpi.com/1996-1073/16/16/6042>
- [8] Ofgem, “Investigation into the 9 august 2019 power outage,” Office of Gas and Electricity Markets (Ofgem), Tech. Rep., January 2020, accessed: 29-01-2025. [Online]. Available: <https://www.ofgem.gov.uk/publications/investigation-9-august-2019-power-outage>
- [9] R. Yan, N.-A. Masood, T. Kumar Saha, F. Bai, and H. Gu, “The anatomy of the 2016 south australia blackout: A catastrophic event in a high renewable network,” *IEEE Transactions on Power Systems*, vol. 33, no. 5, pp. 5374–5388, 2018.
- [10] G. Zhang, H. Zhong, Z. Tan, T. Cheng, Q. Xia, and C. Kang, “Texas electric power crisis of 2021 warns of a new blackout mechanism,” *CSEE Journal of Power and Energy Systems*, vol. 8, no. 1, pp. 1–9, 2022.
- [11] C. Zhan, J. Ge, F. Hao, H. Zhu, C. Wang, N. Wang, H. Wu, and X. Wang, “Assuring security and stability of a remote/islanded large electric power system with high penetration of variable renewable energy resources,” *IEEE Power Electronics Magazine*, vol. 12, no. 1, pp. 53–63, 2025.

- [12] B. Badrzadeh, C. Cardozo, M. Hishida, S. Shah, I. Huq, N. Modi, and A. Morton, "Grid-forming inverters: Project demonstrations and pilots," *IEEE Power and Energy Magazine*, vol. 22, no. 2, pp. 66–77, 2024.
- [13] S. Wang, D. Lu, Z. Zhu, S. Wang, Y. Yin, S. Sun, and Q. Zhang, "Modeling and stability analysis of grid-forming inverters based on synchronization control equivalence," in *2024 CPSS & IEEE International Symposium on Energy Storage and Conversion (ISESC)*, 2024, pp. 865–870.
- [14] Y. Li, Y. Gu, and T. C. Green, "Revisiting grid-forming and grid-following inverters: A duality theory," *IEEE Transactions on Power Systems*, vol. 37, no. 6, pp. 4541–4554, 2022.
- [15] W. Qiu, Q. Yang, T. Yang, X. Ma, X. Xiao, H. Shi, Y. Zhao, and S. Liang, "A grid forming/following sequence switching control strategy for supporting frequency stability of isolated power grids," in *2023 5th Asia Energy and Electrical Engineering Symposium (AEEES)*, 2023, pp. 212–217.
- [16] L. Ding, X. Lu, and J. Tan, "Comparative small-signal stability analysis of grid-forming and grid-following inverters in low-inertia power systems," in *IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society*, 2021, pp. 1–6.
- [17] J. Zhou, S. Bai, L. Zheng, Z. Tian, Z. Sun, J. Zhang, and S. Yang, "Critical events/moments identification method for power system transient stability analysis," in *2024 3rd International Conference on Energy and Electrical Power Systems (ICE-EPS)*, 2024, pp. 681–685.
- [18] Y. Zhou, H. Xin, D. Wu, F. Liu, Z. Li, G. Wang, H. Yuan, and P. Ju, "Small-signal stability assessment of heterogeneous grid-following converter power systems based on grid strength analysis," *IEEE Transactions on Power Systems*, vol. 38, no. 3, pp. 2566–2579, 2023.
- [19] Y. Chen, W. Xu, Y. Liu, Z. Mao, Z. Bao, W. Yao, E. M. Rashad, and M. G. Hussien, "Small-signal system frequency stability analysis of the power grid integrated with type-ii doubly-fed variable speed pumped storage," *IEEE Transactions on Energy Conversion*, vol. 38, no. 1, pp. 611–623, 2023.
- [20] H. Ding, R. Kar, Z. Miao, and L. Fan, "A novel design for switchable grid-following and grid-forming control," *IEEE Transactions on Sustainable Energy*, vol. 16, no. 2, pp. 1301–1314, 2025.
- [21] N. Hatziargyriou, J. Milanovic, C. Rahmann, V. Ajjarapu, C. Canizares, I. Erlich, D. Hill, I. Hiskens, I. Kamwa, B. Pal, P. Pourbeik, J. Sanchez-Gasca, A. Stankovic, T. Van Cutsem, V. Vittal, and C. Vournas, "Definition and classification of power system stability – revisited & extended," *IEEE Transactions on Power Systems*, vol. 36, no. 4, pp. 3271–3281, 2021.
- [22] C. Eckel, D. Babazadeh, and C. Becker, "Classification of converter-driven stability and suitable modeling and analysis methods," *IEEE Access*, vol. 12, pp. 53 056–53 073, 2024.

- [23] F. Gao and T. Xu, *Coordination and Optimization of Grid-Tied Power Converters: From Pulse Width Modulation Perspective*, ser. Power Systems. Springer Nature Singapore, 2021. [Online]. Available: <https://books.google.co.id/books?id=b4NSEAAAQBAJ>
- [24] L. Kunjumammed, S. Kuenzel, and B. Pal, “Chapter three - synchronous machine modelling,” in *Simulation of Power System with Renewables*, L. Kunjumammed, S. Kuenzel, and B. Pal, Eds. Academic Press, 2020, pp. 39–80. [Online]. Available: <https://www.sciencedirect.com/science/article/pii/B9780128111871000032>
- [25] S. Chapman, *Electric Machinery Fundamentals*, ser. McGraw-Hill Series in Electrical and Computer Engineering. McGraw-Hill Companies, Incorporated, 2004. [Online]. Available: <https://books.google.co.id/books?id=yJ9HzeEACAAJ>
- [26] L. Fan and Z. Miao, *Modeling and Stability Analysis of Inverter-Based Resources*, 1st ed. CRC Press, 2023. [Online]. Available: <https://doi.org/10.1201/9781003323655>
- [27] P. W. Sauer, M. A. Pai, and J. H. Chow, *Small-Signal Stability*. John Wiley & Sons, Ltd, 2017. [Online]. Available: <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119355755.ch8>
- [28] —, *Small-Signal Stability*. John Wiley & Sons, Ltd, 2017. [Online]. Available: <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119355755.ch8>
- [29] K.-E. Sari and B. Sari, “Modeling and experimental identification of salient-pole synchronous machine,” in *Proceedings of the 4th International Conference on Electrical Engineering and Control Applications*, S. Bououden, M. Chadli, S. Ziani, and I. Zelinka, Eds. Singapore: Springer Nature Singapore, 2021, pp. 407–425.
- [30] P. Kundur, N. Balu, and M. Lauby, *Power System Stability and Control*, ser. EPRI power system engineering series. McGraw-Hill, 1994. [Online]. Available: <https://books.google.co.id/books?id=0fPGngEACAAJ>