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Modelling and Simulation of West African Power Transmission Networks: A 2008 Case Study

M, o, n, a, A, b, d, e, l, a, z, i, z, ,, A, h, m, e, d, E, l, -, S, a, y, e, d, ,, N, a, d, i, a, E, l, -, M, a, s, r, y, ,, K, a, r, i, m, H, a, s, s, a, n

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Abstract

This study addresses a current research gap in Engineering concerning Modeling and Simulation of Power Transmission Networks in West Africa in Egypt. The objective is to clarify key debates, identify practical implications, and outline a focused agenda for scholarship and policy. A mixed-methods design was used, combining survey and interview data collected over the study period. The analysis indicates persistent structural constraints alongside emerging local innovations; however, evidence remains uneven across contexts and sectors. The paper argues for context-specific approaches and stronger empirical foundations in future research. Stakeholders should prioritise inclusive, locally grounded strategies and improve data transparency. Modeling and Simulation of Power Transmission Networks in West Africa, Egypt, Africa, Engineering, original research This structured abstract provides a standardised summary to support rapid screening, indexing, and assessment of scholarly contribution.