Investigating the Performance of Power Industry in a Developing Nation for Industrialization and Environmental Security

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Abstract : Due to supply irregularity and frequent outages, the need for reliability in power supply has grown unsatisfactorily over time in developing nations, impeding industrialization and fueling insecurity. This article attempts to break down the Nigerian power issue into its numerous sub-sectors in order to pinpoint the industry's ailment and suggest a viable fix. Monthly average performance data were obtained for the various sub-sectors across the industry for eight consecutive quarters. Whereas the amount of energy generated was found to be insufficient to engender industrialization in a nation like Nigeria, the transmission infrastructure was inadequate for the amount of power needed to be wheeled. Additionally, the distribution subsector was plagued with problems such as revenue collection inefficiency, severe enough to impede the growth of the entire industry. The country's goal of attaining energy sufficiency and industrialization would significantly be closer to reality with a conscious effort to increase the base of power generation through aggressive investment in Combined Cycle Gas Turbines (CCGT), decentralization of the transmission infrastructure, and strict monitoring of the distribution sub-sector for improved accountability and system reliability.

Keywords : performance, power industry, industrialization, security, energy

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