

## **INTRODUCTION OF CONDITION MONITORING AND CONDITION DIRECTED TECHNIQUES IN MAINTENANCE OF AFAM POWER STATION IN RIVERS STATE NIGERIA**

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### **ABSTRACT**

*The need for improved performance of the huge investment in industrial plant particularly electrical generating machinery in recent times necessitates the application of condition monitoring techniques in its maintenance. This can provide early warning of potential failure with the opportunity of organizing avoidance strategies to minimize lost in time and unexpected costs. This may greatly improve generation and production efficiency. This paper presents a methodology, which is useful in preventive maintenance (PM) and predictive maintenance (PDM) when applied to Afam Thermal Power Station in the Rivers State of Nigeria. This has lead to some proactive approach to maintenance because the action is triggered by the unscheduled event of equipment failure. With this kind of maintenance policy, the maintenance cost is high due to equipment operating under crises condition, secondary drainages and penalty associated with cost production. It shows a paradigm shift of knowing when things are starting to fail and how to prevent failure. Hence two failure perspectives are in focus-functionally and component failures. The functional perspective expresses what the component does, the component perspective shows how it deteriorates.*

**KEYWORDS:** *Condition Monitoring, Failures, Fault Diagnoses, AFAM Power Station*

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