

The Application of Maintenance Strategy in Energy Power Plant: A Case Study

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Abstract : This paper presents a case study on applying maintenance strategies observed in a turbo-generator at a coal power plant. Turbo generators are one of the primary and critical components in energy generation. It is essential to apply correct maintenance strategies and apply operational procedures accordingly. The maintenance strategies are implemented to ensure the high reliability of the equipment. The study was carried out at a coal power station which will transit to a cleaner energy source in the nearest future. The study is relevant as lessons learned in this system will support plans and operational models implemented when cleaner energy sources replace coal-powered turbines. This paper first outlines different maintenance strategies executed on the turbo-generator modules. Secondly, the impacts of human factors on a coal power station are discussed, and the findings prompted recommendations for future actions.

Keywords : maintenance strategies, turbo generator, operational error, human factor, electricity generation

Conference Title : ICAIEE 2022 : International Conference on Artificial Intelligence and Energy Engineering

Conference Location : New York, United States

Conference Dates : December 09-10, 2022