

## ***RELIABILITY AND OTHER DAMAGE ANALYSIS OF KHD GENERATOR UNIT MACHINE IN PLTD BENGKALIS***

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### ***ABSTRACT***

*The KHD engine is a diesel powered power plant in the Bengkalis PLTD. The machine is cleaned and maintained, but the engine is still frequently damaged. To solve this problem, an analysis is needed to determine the reliability value and the rate of damage to the KHD machine. That way, it can be done with proper engine maintenance planning (Preventive Maintenance) so that it can reduce the number of engine failures that occur suddenly. The purpose of this study was to determine the reliability and rate of damage to the KHD machine to determine the repair time interval. Research using analysis determines the value of reliability, damage rate, MTF, MTTR. Based on the results of the study, the critical components based on their groups, namely the KHD engine auxiliary components, experienced a breakdown of 84 time based on the MTF value, and the repair time was 20 minutes in one time the damage occurred based on the MTTR value and where the machine reliability in 24 working hours was 80% of the calculation of the function. distribution.*

*Keywords: Maintenance, Reliability, MTF, MTTR.*