**ABSTRACT** 

Electrical energy is very influential in the development industry today, and is a

requirement that can not be separated again in human life so that the need for a

mechanism for maintenance of a power plant currently available.

This study aims to identify and assess the increased productivity of the machine

pulverize with Overall Equipment Effectiveness method (OEE), age componen engine

failure with the method of design modularity and cost efficiency through Total

Productive Maintenance (TPM). The results of this study is the OEE value ie 47.9%,

and the time of the failure of engine components are comprised of 10 types of

components with the component failure time on average 12 to 24 months and the total

expected cost of maintenance, replacement cost of engine components 33,3 milliar

rupiah and repair cost of engine components 11,9 milliar rupiah.

Keywords: Overall Equipment Effectiveness, Modularity Design

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