

ANALISIS *OVERALL EQUIPMENT EFFECTIVENESS* (OEE) PADA MESIN *CATERPILLAR TYPE 3512B* DI PT. PLN (PERSERO) ULPLTD BAGAN BESAR PLTD BENGKALIS

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ABSTRAK

PT. PLN (Persero) ULPLTD Bagan Besar PLTD Bengkulu adalah perusahaan Pembangkit Listrik Tenaga Diesel (PLTD) dimana mesin diesel sebagai penggerak utama (*prime mover*). Dalam hal ini peran perawatan mesin sangatlah dibutuhkan agar tidak ada kendala dalam proses pendistribusian daya masyarakat khususnya untuk di Pulau Bengkulu. Oleh sebab itu, perlu adanya pengidentifikasian untuk mengukur tingkat efektivitas kerja mesin dengan menggunakan metode *Overall Equipment Effectiveness* (OEE). *Overall Equipment Effectiveness* (OEE) merupakan metode pengukuran efektivitas keseluruhan suatu mesin produksi yang melibatkan pengukuran tingkat efektivitas waktu, tingkat kinerja mesin, serta tingkat kualitas produk yang dihasilkan (Nakajima 1988). Pengukuran tingkat efektivitas kerja mesin *Caterpillar Type 3512B* dengan metode *Overall Equipment Effectiveness* (OEE) di PT. PLN (Persero) ULPLTD Bagan Besar PLTD Bengkulu pada Periode Desember 2018 – Maret 2019 hasil yang didapatkan belum memenuhi nilai *World Class* Ideal OEE dengan nilai persentase dibawah 85%.

Kata kunci : *Overall Equipment Effectiveness* (OEE), *Maintenance Costs*.

ANALYSIS OVERALL EQUIPMENT EFFECTIVENESS (OEE) ON CATERPILLAR MACHINES TYPE 3512B AT PT. PLN (PERSERO) ULPLTD BAGAN BESAR PLTD BENGKALIS

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ABSTRACT

PT. PLN (Persero) ULPLTD Bagan Besar PLTD Bengkalis where the diesel engine is the prime mover. In this case the role of engine maintenance is needed so that there are no obstacles in the process of distributing community power, especially for Bengkalis Island. Therefore, it is necessary to identify to measure the level of effectiveness of the work of the machine by using the Overall Equipment Effectiveness (OEE) method. Overall Equipment Effectiveness (OEE) is a method of measuring the overall effectiveness of a production machine that involves measuring the level of effectiveness of time, the level of machine performance, and the level of quality of products produced (Nakajima 1988). Measuring the level of work effectiveness of the Caterpillar Type 3512B engine with the Overall Equipment Effectiveness (OEE) method at PT. PLN (Persero) ULPLTD Bagan Besar PLTD Bengkalis in the December 2018 - March 2019 period the results obtained do not meet the value of the Word Class Ideal OEE with a percentage value below 85%.

Keywords : Overall Equipment Effectiveness (OEE), Maintenance Costs.