

ABSTRACT

PT Pertamina Gas is a company involved in the midstream and downstream sectors of gas industry in Indonesia that unreleased from problems that have a relation with level of gas transmission availability which determines the quality and productivity of company in transmitting gas until arrive to the end users. However, maintenance in turbine machines frequently conduct reactively which machines fixed if occurred a damage (breakdown maintenance). This is can be seen at availability levels that very fluctuative and declining in march 2013 and also december 2013. Therefore, maintenance improvement is required with Total Productive Maintenance approach so that the gas transmission availability will reach the target.

TPM is an innovative approach to maintenance that optimizes equipment effectiveness, eliminates breakdowns and promotes autonomous maintenance by operators through day-to-day activities involving the total workforces. According to the primary and secondary data analysis, planned maintenance programs (one of pillar in TPM) are the main cause of declining the equipment availability in PT Pertamina Gas Western Java Area especially because of spare part problems.

Based on this, in order to have gas transmission availability reach the target, company needs to conduct Total Productive Maintenance program which include focused maintenance, autonomous maintenance and planned maintenance.

Key Word : availability, total productive maintenance, autonomous maintenance, focused maintenance, planned maintenance



ABSTRAK

PT Pertamina Gas merupakan perusahaan yang bergerak pada sektor *midstream* dan *downstream* pada industri gas di Indonesia yang tidak terlepas dari masalah yang berhubungan dengan tingkat *availability* penyaluran gas yang sangat menentukan kualitas dan produktivitas perusahaan dalam menyalurkan gas hingga tiba di *end user*. Adapun *maintenance* pada mesin turbin sering sekali dilakukan secara reaktif dimana mesin diperbaiki jika terjadi kerusakan (*breakdown maintenance*). Hal ini dapat dilihat pada tingkat *availability* mesin turbin yang sangat fluktuatif dan mengalami penurunan pada bulan Maret 2013 serta Desember 2013. Oleh karena itu diperlukan perbaikan *maintenance* dengan pendekatan *Total Productive Maintenance* (TPM) agar *availability* penyaluran gas mencapai target.

TPM merupakan pendekatan inovatif terhadap pemeliharaan yang mengoptimalkan *equipment effectiveness*, mengeliminasi *breakdown*, mendorong tercapainya *autonomous maintenance* oleh operator dalam aktivitas sehari-harinya dengan melibatkan seluruh pekerja yang ada. Adapun berdasarkan hasil analisa data primer dan sekunder didapat bahwa program *planned maintenance* (salah satu pilar TPM) merupakan penyebab utama menurunnya *availability equipment* di PT Pertamina Gas Area JBB dikarenakan masalah *spare part*.

Berdasarkan hal ini, agar *availability* penyaluran gas mencapai target, perusahaan perlu menerapkan program *Total Productive Maintenance* yang meliputi *focused maintenance*, *autonomous maintenance* dan program pemeliharaan terencana (*planned maintenance*).

Kata Kunci : *availability, total productive maintenance, autonomous maintenance, focused maintenance, planned maintenance*



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