ABSTRAK

Modifikasi Rangkaian Logika dan Pola Operasi Coalfeeder Terhadap Gangguan Coal Plugging di PLTU PT.Indonesia Power UP. Suralaya Unit 1-4

Gangguan *Coal Pluging* pada *Coal feeder* sering terjadi PLTU PT.Indonesia Power UP. Suralaya Unit 1-4. Hal ini diakibatkan kualitas batu bara yang kurang baik dan keadaan basah sehingga terjadi penempelan batu bara di dinding *Outlet Bunker / Inlet Coal Feeder* dan *Outlet Coal Feeder*. Akumulasi ini yang akhirnya menyumbat aliran batubara dari bunker menuju Coalfeeder atau yang di sebut *Coal Plugging*. Akibat gangguan ini, banyak sekali kerugian yang dialami perusahaan dimulai dari hilangnya potensi penjualan Daya MW (Derated), biaya untuk *Clearing Pulverizer*, dan Pengoperasian *Pulverizer* (*Start Pulverizer*).

Seiring dengan berjalannya waktu dalam menanggulangi ganggguan ini, saya selaku penulis berinisiatif membuat metode baru dalam menanggulangi gangguan *Plugging* ini mengingat waktu yang dibutuhkan dalam penanggulangan gangguan dan potensi kerugian yang dialami perusahaan. Pada inti nya, metode ini adalah mengoperasikan kembali *Coal Feeder* ketika terjadi gangguan *Coal Plugging* tanpa mengoperasikan *Sequence Stop Pulverizer*. Sehingga penanggulangan *Coal Plugging* bisa dilakukan oleh operator PLTU ketika *Pulverizer* masih beroperasi. Selain itu, rangkaian logika yang terdapat dalam pengoperasian *Coal Feeder* masih ada beberapa kesalahan yang harus diperbaiki terlebih lagi terhadap sensitifitas gangguan *Coal Plugging*. Rangkaian yang sudah diterapkan ini terlalu sensitif terhadap terjadinya *Trip Pulverizer* (berhenti secara paksa) ketika terjadi gangguan *Coal Plugging*.

Dengan perbaikan rangkaian logika pada *Coal Feeder* dan metode pola operasi *Coal Feeder* terhadap gangguan *Coal Plugging* ini, potensi kerugian baik secara finansial maupun non finansial yang dialami perusahaan dapat ditekan dan diminimalisasikan.

Kata Kunci : *Coal Feeder, Coal Plugging, Derating, Pulverizer*

ABSTRACT

Modification of Logic Circuit and Methode of Operation Coal Feeder to Coal Plugging Disrupton at Steam Coal Power Plant PT.Indonesia Power UP . Suralaya Unit 1-4

Coal Pluging on Coal feeder is frequent a PT.Indonesia Power UP. Suralaya Unit 1-4. This is due to the quality of coal is not good and wet, causing attachment of a coal wall of Bunker Outlet / Inlet and Outlet Coal Feeder Coal Feeder. This accumulation that eventually block the flow of coal from the Bunker to the Coal Feeder or Called Coal Plugging. As a result of this disruption, a lot of losses to the company starting from the loss of potential sales of MW Power (derated), fees for Clearing Pulverizer and Pulverizer Operation (Pulverizer Start).

Over time in resolve this problem, I as the author of the initiative to create a new method in resolve this Plugging disorder considering the time needed in the response to disruptions and potential losses to the company. Basicaly, this is a method of re-operate when an interruption Coal Feeder Coal Plugging without operate Pulverizer Stop Sequence. Coal Plugging so the resolve menthode can be done by the power plant operator when Pulverizer still operating. In addition, the logic circuit contained in the operation of Coal Feeder there are still some errors that should be corrected moreover the sensitivity of Coal Plugging. The circuit has been applied is too sensitive to the occurrence Trip Pulverizer (forcibly stop) when an interruption occurs Coal Plugging.

With the improvement in the Coal Feeder logic circuit and method of operation Coal Feeder againt this problem, the potesntial losses for both financial and non financial can be minimized.

Key Words : *Coal Feeder, Coal Plugging, Derating, Pulverizer*