

ABSTRAK

PLTU Pangkalan Susu unit 2 mempunyai kapasitas daya mampu netto 200 MW. Dalam menghasilkan daya mampu netto tersebut membutuhkan adanya peralatan bantu yang beroperasi. Terdapat beberapa peralatan bantu yang membutuhkan tegangan 6.3 kV dalam pengoperasiannya, seperti ID Fan, FD Fan, PA Fan, Boiler Feed Pump, CCCW Pump, Mill, Vacuum Pump dan Condensate Pump. Dengan beroperasinya peralatan bantu ini nantinya akan dapat dihitung nilai pemakaian sendiri.

PLTU Pangkalan Susu unit 2 telah memasuki periode COD (*Commercial Operation Date*) pada tahun 2015. Selanjutnya dilakukan analisis untuk mengetahui karakteristik kerugian peralatan bantu 6.3 kV terhadap pemakaian sendiri setelah periode COD (*Commercial Operation Date*) tersebut sampai sebelum dilaksanakan pemeliharaan periodik (FYI) *First Year Inspection* yaitu dari September 2015 – Oktober 2016 menggunakan metode pareto analisis. Analisis ini dilaksanakan dengan membandingkan data aktual dari nilai pemakaian sendiri masing-masing peralatan bantu 6.3 kV dengan data acuan berdasarkan hasil *performance test*. Dengan menggunakan pareto analisis, karakteristik kerugian pemakaian sendiri dari masing-masing peralatan bantu 6.3 kV dapat diketahui. Dari hasil pareto analisis tersebut diperoleh 5 peralatan bantu 6.3 kV yang kerugiannya berpengaruh penting terhadap pemakaian sendiri unit 2 PLTU Pangkalan Susu setelah periode COD (*Commercial Operation Date*) yaitu : Boiler Feed Pump A, CCCW Pump A, ID Fan A, CCCW Pump B dan Boiler Feed Pump B.

Kata kunci : PLTU, Pemakaian Sendiri, Kerugian, Pareto Analisis, COD

ABSTRACT

Pangkalan Susu Coal Fired Power Plant unit 2 has a net power capacity of 200 MW. In producing the net capability, it requires the existence of auxiliary equipment that operates. There are several auxiliary equipment that requires a voltage of 6.3 kV in operation, such as ID Fan, FD Fan, PA Fan, Boiler Feed Pump, CCCW Pump, Mill, Vacuum Pump and Condensate Pump. With the operation of this auxiliary equipment, it will be able to calculate the value of its auxiliary power.

Pangkalan Susu Coal Fired Power Plant unit 2 has done the COD (Commercial Operation Date) period in 2015. Then an analysis is carried out to determine the loss characteristics of 6.3 kV auxiliary equipment against its auxiliary power after the COD (Commercial Operation Date) period until prior periodic maintenance (FYI) First Year Inspection, which is from September 2015 - October 2016 using the pareto analysis method. This analysis is carried out by comparing the actual data from the value of each 6.3 kV auxiliary equipment with reference data based on the results of the performance test. By using pareto analysis, the characteristics of self-use loss from each auxiliary equipment 6.3 kV can be known. From the results of the pareto analysis, it was obtained 5 6.3 kV auxiliary equipment which have an important effect on the use of Pangkalan Susu Coal Fired Power Plant unit 2 after the COD (Commercial Operation Date) period, namely: Boiler Feed Pump A, CCCW Pump A, ID Fan A, CCCW Pump B and Boiler Feed Pump B.

Keywords: Coal Fired Power Plant, Auxiliary power, Losses, Pareto Analysis, COD