ABSTRAK

Analisa Risiko Kerja Pada Proses Start-Up Unit Boiler-Turbine Dengan Metoda *Enterprise Risk Management (ERM)*"

Kegagalan proses Start-Up Boiler dan Turbin unit 1 di PLTU PT Krakatau Daya Listrik menjadi salah satu penyebab terganggunya aktivitas unit pembangkit serta memiliki risiko kerja, maka dilakukan perbaikan dengan membuat kajian dengan metode Enterprise Risk Mangement (ERM), yang merupakan pengelolaan Risk Management dengan mengidentifikasi risiko, menentukan nilai dan tingkat risiko, dan respon sikap (Risk Response). Pada Boiler unit 1 selama tahun 2010 diketahui ada 5 komponen utama penyebab kegagalan Start-Up yaitu burner system, pult control, feed water boiler installation, steam pipe valve, dan forced draft fan dengan biaya kerugian paling tinggi sebesar Rp.12.703.078,-. Melalui proses pengelolan risiko, kemudian ditentukan sikap (Risk Response) menerima / "Acceptance" untuk 4 komponen utama Boiler (burner system, feed water boiler installation, steam pipe valve, dan forced draft fan) dan 1 komponen utama Boiler diambil sikap risiko dikurangi / "Reduction" yaitu komponen pult control karena memiliki tingkat risiko tinggi. Sedangkan untuk Turbin diketahui ada 4 komponen utama penyebab kegagalan Start-Up yaitu turbine oil system, vibration, pult control, dan steam pipe valve dengan biaya kerugian paling tinggi sebesar Rp.16.795.380,- dan hasil pengelolaan risiko ditentukan sikap yaitu menerima / "Acceptance" karena memiliki tingkat risiko yang rendah. Perbaikan yang dilakukan oleh perusahaan adalah melakukan kegiatan pengendalian dengan sistem prioritas part check list dari komponen utama sebelum Start-Up dilakukan, penyampaian informasi target durasi waktu serta keamanan Start-Up, dan proses monitoring evaluasi hasil start up sehingga saat proses start up berikutnya tidak ada kendala dan efek risiko yang timbul lagi.

Kata kunci: Start-Up, Boiler,Turbin, ERM, Risk Management, Risk Response

Failure of the Start-Up Boiler and Turbine unit 1 in Power Plant PT Krakatau Daya Listrik is one cause disruption activity generating units as well as the risk of work, then it can be repaired by making a study of the methods of Enterprise Risk Management (ERM), which is a management of the Risk Management by identifying risks, determine the value and level of risk, and response to attitude (Risk Response). On the Boiler unit 1 during the year of 2010 there are 5 main components known to be the causes of the failure of the Start-Up, that is burner system, pult control, feed water boiler installation, steam pipe valve, and forced draft fan with the highest loss cost amounting to Rp. 12.703.078,-. From the process of management of risk, then determined attitude (Risk Response) is received / "Aceptance" for 4 major components of Boiler (burner system, feed water boiler installation, steam pipe valve, and a forced draft fan) and 1 main components of Boiler is taken response risk is reduced / "Reduction" it is pult control because it has a high level of risk. Then for the Turbine is known there are 4 main components that causes start-up failure of Turbine, it is oil system, vibration, pult, steam pipe valve, with the highest loss cost amounting to Rp. 16.795.380,- and the results of risk management are determined is received / "Acceptance" because it has a low level of risk. Improvements made by the company is to perform control activities with the system control part priority check list of the main components before Start-Up performed, inform the target duration and start up security, evaluation of the results of the monitoring process Start-Up so that when the next start up no more problems and the effects of risks arising again.

Keyword : Start-Up, Boiler,Turbine, ERM, Risk Management, Risk Response