SHUTDOWN RISK ANALYSIS
IN POWER PLANT OF PT NEWMONT NUSA TENGGARA

Nama Mahasiswa : Erwin Darmawan
NRP : 9111202808
Pembimbing : Ir. I Putu Artama Wiguna, MT, PhD

ABSTRACT

Power plant’s shutdown is a project that has a high degree of risk. Any risk of shutdown will affect to the failure or delay of the shutdown project. Delays and project failures can lead to plant shutdown costs are very high both because diesel costs and costs due to lost production.

RII (relative Importance Index) is calculated to obtain the value of likelihood, impact and risk rating. Risk rating obtained from the multiplication of the likelihood and consequences of each risk. The scales of 1 to 5 are given to the possibility and impact according to the PT NNT’s Risk Matrix.

Power Plant shutdown’s variable risk in PT NNT divided into ten categories, there are: cost risk, duration risk, safety risk, environmental/weather risk, the risk of sabotage, material and equipment risk, resource risk, the risk of harm to the plant reliability, the risk of additional work and changes in recent times risk.

The results showed that the risk on the turbine tasks and risk in running plant are risks that have the highest rating. Mitigation plans implemented to reduce the risk rating using FGD method, create STPs, bring in consultants, training of personnel, turbine life extentention study, ensure the availability of recommended spare part, diesel plant in good condition are form of controls to reduce the risk rating.

Keywords: Shutdown, risk analysis, Power Plant.