

SHRINKAGE TECHNICAL ANALYSIS ON DISTRIBUTION SYSTEM PT PLN (PERSERO) RAYON KARANGASEM

Bagus Try Sutrisno K, 2012-11-162

Under the Guidance of Ir.Djoko Susanto, MT

ABSTRACT

In the distribution of electrical energy from the power plant to the consumer occur loss of energy or energy losses (losses). Losses of energy in a electrical system must always exist. This is due to the content of prisoners on permanent conductor and the nature of the network itself. Based on national standards, losses in transmission lines and distribution ideally is about 8% - 10%. This will show the effects of the increase of the electric power load of the technical losses in the network. The greater the load being served, it will generate technical losses are greater. Technical loss in the distribution system is the sum of the $I^2 R$ losses prisoners and can be easily found when peak flows are known. Technical loss of electricity network depends on the kind of loading on the channel (distributed load, concentrated). Technical loss in the transformer consists of zero load losses and loss at the time of loading. Loss on zero load known as iron loss, and is independent of the load current, while losses at loading time known as the loss of copper whose value varies according to the square of the load current. PT PLN (Persero) Area East Bali is part of PT PLN (Persero) Distribution of Bali that play a role in the distribution of electrical energy memiliki coverage ample work area so that in the distribution of electrical energy can occur considerable energy losses. Loss of energy is a condition or a condition where the amount of energy supplied is not equal to the energy received on the revenue side. Shrinkage (losses) is caused by two factors: technical factors and other non-technical factors. Loss of electrical energy is closely related to the efficiency of the electric power system. For that we need to do an analysis of the calculation of the total electrical energy losses that occur in the distribution system of electricity to PT PLN (Persero) Area East Bali so do efforts to pressure losses to a minimum. Shrinkage calculation is done by comparing the total shrinkage that occurs in PT PLN (Persero) Area East Bali.

Keywords: Losses (Losses), Source Losses, Technical Loss